

ALMANAC

XV

PLANETARY
PHENOMENA OF
NEPTUNE IN BCE

The almanac XV contains a list of planetary phenomena of Neptune from the 6th millennium BCE to the 1st millennium BCE, from the 54th century BCE to the 1st century BCE.

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 1

Attention, astronomical year style is used: The year -5400 in astronomical counting style is the year 5401 BCE in historical counting style.

retrograde	-5400 Apr 08 j 21:17	25°M44'18		retrograde	-5393 Apr 25 j 19:22	11°J20'19	
opposition	-5400 Jun 28 j 20:49	24°M19'10	0°-6'-43	min. Earth dist.	-5393 Jul 14 j 09:38	9°J56'44	28.91599 AU
min. Earth dist.	-5400 Jun 27 j 21:07	24°M20'48	28.96968 AU	opposition	-5393 Jul 15 j 10:44	9°J54'59	0°-46'-26
direct	-5400 Sep 14 j 16:24	22°M56'25		direct	-5393 Sep 30 j 22:29	8°J32'09	
conjunction	-5400 Dec 25 j 06:23	25°M23'37	0°-8'-57	conjunction	-5392 Jan 10 j 17:43	10°J59'50	0°-45'-56
minimum elong	-5400 Dec 25 j 06:22	25°M23'37	0°09'13	minimum elong	-5392 Jan 10 j 17:43	10°J59'50	0°46'14
behind sun begin	-5400 Dec 25 j 00:54	25°M23'07		max. Earth dist.	-5392 Jan 11 j 19:36	11°J02'16	30.91191 AU
behind sun end	-5400 Dec 25 j 11:51	25°M24'07		retrograde	-5392 Apr 27 j 06:59	13°J34'37	
max. Earth dist.	-5400 Dec 26 j 06:17	25°M25'52	30.96403 AU	opposition	-5392 Jul 16 j 23:04	12°J09'17	0°-51'-55
retrograde	-5399 Apr 11 j 10:40	27°M57'47		min. Earth dist.	-5392 Jul 15 j 23:15	12°J10'56	28.90869 AU
min. Earth dist.	-5399 Jun 30 j 10:00	26°M34'10	28.95930 AU	direct	-5392 Oct 02 j 08:52	10°J46'24	
opposition	-5399 Jul 01 j 09:09	26°M32'34	0°-12'-29	conjunction	-5391 Jan 12 j 06:22	13°J14'10	0°-51'-1
direct	-5399 Sep 17 j 02:22	25°M09'46		minimum elong	-5391 Jan 12 j 06:22	13°J14'10	0°51'20
conjunction	-5399 Dec 27 j 17:57	27°M37'01	0°-14'-19	max. Earth dist.	-5391 Jan 13 j 08:20	13°J16'37	30.90411 AU
minimum elong	-5399 Dec 27 j 17:57	27°M37'01	0°14'34	retrograde	-5391 Apr 29 j 20:27	15°J49'00	
behind sun begin	-5399 Dec 27 j 15:08	27°M36'46		min. Earth dist.	-5391 Jul 18 j 10:38	14°J25'20	28.90037 AU
behind sun end	-5399 Dec 27 j 20:46	27°M37'16		opposition	-5391 Jul 19 j 11:05	14°J23'38	0°-57'-19
max. Earth dist.	-5399 Dec 28 j 19:17	27°M39'24	30.95418 AU	direct	-5391 Oct 04 j 20:48	13°J00'42	
retrograde	-5398 Mar 18 j 14:17	0°J		conjunction	-5390 Jan 14 j 18:55	15°J28'33	0°-56'-2
retrograde	-5398 Apr 13 j 23:34	0°J11'15		minimum elong	-5390 Jan 14 j 18:55	15°J28'33	0°56'20
opposition	-5398 May 10 j 18:21	30°RM		max. Earth dist.	-5390 Jan 15 j 19:52	15°J30'54	30.89527 AU
opposition	-5398 Jul 03 j 21:25	28°M45'59	0°-18'-13	retrograde	-5390 May 02 j 09:35	18°J03'26	
min. Earth dist.	-5398 Jul 02 j 21:01	28°M47'41	28.95002 AU	opposition	-5390 Jul 21 j 23:19	16°J38'01	-1°-2'-38
direct	-5398 Sep 19 j 14:44	27°M23'10		min. Earth dist.	-5390 Jul 21 j 00:06	16°J39'38	28.89126 AU
conjunction	-5398 Dec 30 j 05:23	29°M50'27	0°-19'-40	direct	-5390 Oct 07 j 06:44	15°J15'01	
minimum elong	-5398 Dec 30 j 05:22	29°M50'27	0°19'56	conjunction	-5389 Jan 17 j 07:34	17°J42'55	-1°00'-57
max. Earth dist.	-5398 Dec 31 j 06:09	29°M52'48	30.94553 AU	minimum elong	-5389 Jan 17 j 07:34	17°J42'55	1°01'17
retrograde	-5397 Jan 03 j 10:27	0°J		max. Earth dist.	-5389 Jan 18 j 09:17	17°J45'20	30.88590 AU
retrograde	-5397 Apr 16 j 14:36	2°J24'48		retrograde	-5389 May 04 j 22:54	20°J17'49	
min. Earth dist.	-5397 Jul 05 j 09:30	1°J01'10	28.94203 AU	min. Earth dist.	-5389 Jul 23 j 11:29	18°J54'01	28.88173 AU
opposition	-5397 Jul 06 j 09:50	0°J59'29	0°-23'-56	opposition	-5389 Jul 24 j 11:17	18°J52'21	-1°-7'-51
direct	-5397 Aug 15 j 05:23	30°RM		direct	-5389 Oct 09 j 19:33	17°J29'17	
direct	-5397 Sep 22 j 01:55	29°M36'39		conjunction	-5388 Jan 19 j 20:16	19°J57'15	-1°-5'-47
direct	-5397 Oct 28 j 23:05	0°J		minimum elong	-5388 Jan 19 j 20:15	19°J57'15	1°06'06
conjunction	-5396 Jan 01 j 17:14	2°J04'00	0°-25'00	max. Earth dist.	-5388 Jan 20 j 20:46	19°J59'33	30.87640 AU
minimum elong	-5396 Jan 01 j 17:14	2°J04'00	0°25'16	retrograde	-5388 May 06 j 13:47	22°J32'10	
max. Earth dist.	-5396 Jan 02 j 19:32	2°J06'29	30.93799 AU	opposition	-5388 Jul 25 j 23:08	21°J06'39	-1°-12'-58
retrograde	-5396 Apr 18 j 03:06	4°J38'26		min. Earth dist.	-5388 Jul 25 j 00:00	21°J08'16	28.87254 AU
opposition	-5396 Jul 07 j 22:00	3°J13'06	0°-29'-38	direct	-5388 Oct 11 j 06:58	19°J43'29	
min. Earth dist.	-5396 Jul 06 j 21:20	3°J14'49	28.93494 AU	conjunction	-5387 Jan 21 j 09:08	22°J11'33	-1°-10'-31
direct	-5396 Sep 23 j 14:19	1°J50'16		minimum elong	-5387 Jan 21 j 09:08	22°J11'33	1°10'51
conjunction	-5395 Jan 03 j 05:05	4°J17'42	0°-30'-18	max. Earth dist.	-5387 Jan 22 j 10:45	22°J13'57	30.86742 AU
minimum elong	-5395 Jan 03 j 05:05	4°J17'42	0°30'35	retrograde	-5387 May 09 j 02:10	24°J46'28	
max. Earth dist.	-5395 Jan 04 j 06:44	4°J20'07	30.93136 AU	min. Earth dist.	-5387 Jul 27 j 11:41	23°J22'32	28.86406 AU
retrograde	-5395 Apr 20 j 17:01	6°J52'13		opposition	-5387 Jul 28 j 10:56	23°J20'55	-1°-17'-58
min. Earth dist.	-5395 Jul 09 j 09:17	5°J28'37	28.92863 AU	direct	-5387 Oct 13 j 19:45	21°J57'42	
opposition	-5395 Jul 10 j 10:16	5°J26'53	0°-35'-17	conjunction	-5386 Jan 23 j 21:45	24°J25'49	-1°-15'-9
direct	-5395 Sep 26 j 00:45	4°J04'03		minimum elong	-5386 Jan 23 j 21:44	24°J25'49	1°15'28
conjunction	-5394 Jan 05 j 17:03	6°J31'33	0°-35'-33	max. Earth dist.	-5386 Jan 24 j 22:31	24°J28'09	30.85952 AU
minimum elong	-5394 Jan 05 j 17:02	6°J31'33	0°35'51	retrograde	-5386 May 11 j 16:24	27°J00'46	
max. Earth dist.	-5394 Jan 06 j 19:32	6°J34'03	30.92505 AU	opposition	-5386 Jul 30 j 22:43	25°J35'11	-1°-22'-51
retrograde	-5394 Apr 23 j 04:41	9°J06'11		min. Earth dist.	-5386 Jul 29 j 23:15	25°J36'50	28.85695 AU
opposition	-5394 Jul 12 j 22:34	7°J40'51	0°-40'-53	direct	-5386 Oct 16 j 06:40	24°J11'55	
min. Earth dist.	-5394 Jul 11 j 22:07	7°J42'33	28.92240 AU	conjunction	-5385 Jan 26 j 10:42	26°J40'08	-1°-19'-39
direct	-5394 Sep 28 j 12:01	6°J18'01		minimum elong	-5385 Jan 26 j 10:41	26°J40'08	1°19'59
conjunction	-5393 Jan 08 j 05:17	8°J45'37	0°-40'-46	max. Earth dist.	-5385 Jan 27 j 12:15	26°J42'32	30.85296 AU
minimum elong	-5393 Jan 08 j 05:17	8°J45'37	0°41'05	retrograde	-5385 May 14 j 04:47	29°J15'06	
max. Earth dist.	-5393 Jan 09 j 07:23	8°J48'04	30.91882 AU				

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 2

Attention, astronomical year style is used: The year -5385 in astronomical counting style is the year 5386 BCE in historical counting style.

min. Earth dist.	-5385 Aug 01 j 11:28	27° $\mathring{\text{A}}$ 51'07	28.85121 AU	min. Earth dist.	-5377 Aug 19 j 11:22	15° $\mathring{\text{C}}$ 50'20	28.82659 AU
opposition	-5385 Aug 02 j 10:24	27° $\mathring{\text{A}}$ 49'31	-1°-27'-37	opposition	-5377 Aug 20 j 06:54	15° $\mathring{\text{C}}$ 48'58	-2°00'-27
direct	-5385 Oct 18 j 18:26	26° $\mathring{\text{A}}$ 26'13		direct	-5377 Nov 05 j 11:58	14° $\mathring{\text{C}}$ 25'19	
conjunction	-5384 Jan 28 j 23:44	28° $\mathring{\text{A}}$ 54'32	-1°-24'-3	conjunction	-5376 Feb 16 j 12:41	16° $\mathring{\text{C}}$ 54'33	-1°-54'-10
minimum elong	-5384 Jan 28 j 23:43	28° $\mathring{\text{A}}$ 54'32	1°24'22	minimum elong	-5376 Feb 16 j 12:41	16° $\mathring{\text{C}}$ 54'33	1°54'29
max. Earth dist.	-5384 Jan 30 j 00:48	28° $\mathring{\text{A}}$ 56'54	30.84801 AU	max. Earth dist.	-5376 Feb 17 j 10:07	16° $\mathring{\text{C}}$ 56'33	30.82289 AU
	-5384 Feb 27 j 21:34	0° $\mathring{\text{C}}$		retrograde	-5376 Jun 03 j 04:27	19° $\mathring{\text{C}}$ 29'25	
retrograde	-5384 May 15 j 19:33	1° $\mathring{\text{C}}$ 29'31		opposition	-5376 Aug 21 j 18:17	18° $\mathring{\text{C}}$ 03'59	-2°-3'-47
opposition	-5384 Aug 03 j 22:01	0° $\mathring{\text{C}}$ 03'57	-1°-32'-15	min. Earth dist.	-5376 Aug 20 j 23:53	18° $\mathring{\text{C}}$ 05'17	28.82204 AU
min. Earth dist.	-5384 Aug 02 j 22:19	0° $\mathring{\text{C}}$ 05'37	28.84699 AU	direct	-5376 Nov 07 j 01:00	16° $\mathring{\text{C}}$ 40'15	
	-5384 Aug 06 j 06:22	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$					
direct	-5384 Oct 20 j 05:21	28° $\mathring{\text{A}}$ 40'37		conjunction	-5375 Feb 18 j 02:34	19° $\mathring{\text{C}}$ 09'34	-1°-57'-12
	-5384 Dec 29 j 18:52	0° $\mathring{\text{C}}$		minimum elong	-5375 Feb 18 j 02:34	19° $\mathring{\text{C}}$ 09'34	1°57'32
conjunction	-5383 Jan 30 j 12:48	1° $\mathring{\text{C}}$ 09'04	-1°-28'-19	max. Earth dist.	-5375 Feb 18 j 22:53	19° $\mathring{\text{C}}$ 11'28	30.81853 AU
minimum elong	-5383 Jan 30 j 12:48	1° $\mathring{\text{C}}$ 09'04	1°28'40	retrograde	-5375 Jun 05 j 18:27	21° $\mathring{\text{C}}$ 44'21	
max. Earth dist.	-5383 Jan 31 j 13:52	1° $\mathring{\text{C}}$ 11'25	30.84427 AU	min. Earth dist.	-5375 Aug 23 j 10:45	20° $\mathring{\text{C}}$ 20'14	28.81803 AU
retrograde	-5383 May 18 j 06:23	3° $\mathring{\text{C}}$ 44'05		opposition	-5375 Aug 24 j 05:28	20° $\mathring{\text{C}}$ 18'54	-2°-6'-56
min. Earth dist.	-5383 Aug 05 j 11:05	2° $\mathring{\text{C}}$ 20'08	28.84392 AU	direct	-5375 Nov 09 j 13:14	18° $\mathring{\text{C}}$ 55'04	
opposition	-5383 Aug 06 j 09:38	2° $\mathring{\text{C}}$ 18'33	-1°-36'-45	conjunction	-5374 Feb 20 j 16:32	21° $\mathring{\text{C}}$ 24'28	-2°00'-4
direct	-5383 Oct 22 j 15:32	0° $\mathring{\text{C}}$ 55'12		minimum elong	-5374 Feb 20 j 16:32	21° $\mathring{\text{C}}$ 24'28	2°00'23
conjunction	-5382 Feb 02 j 02:07	3° $\mathring{\text{C}}$ 23'46	-1°-32'-28	max. Earth dist.	-5374 Feb 21 j 12:34	21° $\mathring{\text{C}}$ 26'21	30.81482 AU
minimum elong	-5382 Feb 02 j 02:07	3° $\mathring{\text{C}}$ 23'46	1°32'47	retrograde	-5374 Jun 08 j 05:57	23° $\mathring{\text{C}}$ 59'11	
max. Earth dist.	-5382 Feb 03 j 03:22	3° $\mathring{\text{C}}$ 26'08	30.84175 AU	opposition	-5374 Aug 26 j 16:42	22° $\mathring{\text{C}}$ 33'44	-2°-9'-54
retrograde	-5382 May 20 j 19:51	5° $\mathring{\text{C}}$ 58'49		min. Earth dist.	-5374 Aug 25 j 23:21	22° $\mathring{\text{C}}$ 34'58	28.81499 AU
opposition	-5382 Aug 08 j 21:09	4° $\mathring{\text{C}}$ 33'20	-1°-41'-6	direct	-5374 Nov 12 j 00:07	21° $\mathring{\text{C}}$ 09'50	
min. Earth dist.	-5382 Aug 07 j 21:57	4° $\mathring{\text{C}}$ 34'58	28.84178 AU	conjunction	-5373 Feb 23 j 06:35	23° $\mathring{\text{C}}$ 39'19	-2°-2'-45
direct	-5382 Oct 25 j 02:41	3° $\mathring{\text{C}}$ 09'58		minimum elong	-5373 Feb 23 j 06:34	23° $\mathring{\text{C}}$ 39'19	2°03'04
conjunction	-5381 Feb 04 j 15:25	5° $\mathring{\text{C}}$ 38'40	-1°-36'-28	max. Earth dist.	-5373 Feb 24 j 02:25	23° $\mathring{\text{C}}$ 41'10	30.81243 AU
minimum elong	-5381 Feb 04 j 15:25	5° $\mathring{\text{C}}$ 38'40	1°36'48	retrograde	-5373 Jun 10 j 19:40	26° $\mathring{\text{C}}$ 13'57	
max. Earth dist.	-5381 Feb 05 j 15:40	5° $\mathring{\text{C}}$ 40'57	30.83973 AU	min. Earth dist.	-5373 Aug 28 j 09:53	24° $\mathring{\text{C}}$ 49'48	28.81326 AU
retrograde	-5381 May 23 j 08:49	8° $\mathring{\text{C}}$ 13'45		opposition	-5373 Aug 29 j 03:47	24° $\mathring{\text{C}}$ 48'31	-2°-12'-40
min. Earth dist.	-5381 Aug 10 j 11:08	6° $\mathring{\text{C}}$ 49'49	28.83994 AU	direct	-5373 Nov 14 j 11:58	23° $\mathring{\text{C}}$ 24'33	
opposition	-5381 Aug 11 j 08:51	6° $\mathring{\text{C}}$ 48'18	-1°-45'-18	conjunction	-5372 Feb 25 j 20:40	25° $\mathring{\text{C}}$ 54'09	-2°-5'-14
direct	-5381 Oct 27 j 11:38	5° $\mathring{\text{C}}$ 24'54		minimum elong	-5372 Feb 25 j 20:40	25° $\mathring{\text{C}}$ 54'09	2°05'32
conjunction	-5380 Feb 07 j 05:13	7° $\mathring{\text{C}}$ 53'44	-1°-40'-19	max. Earth dist.	-5372 Feb 26 j 15:29	25° $\mathring{\text{C}}$ 55'55	30.81130 AU
minimum elong	-5380 Feb 07 j 05:13	7° $\mathring{\text{C}}$ 53'44	1°40'38	retrograde	-5372 Jun 12 j 07:39	28° $\mathring{\text{C}}$ 28'44	
max. Earth dist.	-5380 Feb 08 j 05:43	7° $\mathring{\text{C}}$ 56'03	30.83773 AU	opposition	-5372 Aug 30 j 14:53	27° $\mathring{\text{C}}$ 03'21	-2°-15'-13
retrograde	-5380 May 24 j 21:53	10° $\mathring{\text{C}}$ 28'49		min. Earth dist.	-5372 Aug 29 j 22:22	27° $\mathring{\text{C}}$ 04'31	28.81300 AU
opposition	-5380 Aug 12 j 20:15	9° $\mathring{\text{C}}$ 03'25	-1°-49'-20	direct	-5372 Nov 15 j 21:13	25° $\mathring{\text{C}}$ 39'19	
min. Earth dist.	-5380 Aug 11 j 22:26	9° $\mathring{\text{C}}$ 04'57	28.83770 AU	conjunction	-5371 Feb 27 j 10:54	28° $\mathring{\text{C}}$ 09'03	-2°-7'-32
direct	-5380 Oct 29 j 00:24	7° $\mathring{\text{C}}$ 39'59		minimum elong	-5371 Feb 27 j 10:54	28° $\mathring{\text{C}}$ 09'03	2°07'51
conjunction	-5379 Feb 08 j 18:56	10° $\mathring{\text{C}}$ 08'57	-1°-44'-2	max. Earth dist.	-5371 Feb 28 j 06:04	28° $\mathring{\text{C}}$ 10'51	30.81176 AU
minimum elong	-5379 Feb 08 j 18:56	10° $\mathring{\text{C}}$ 08'57	1°44'21		-5371 Apr 23 j 09:42	0° $\mathring{\text{A}}$	
max. Earth dist.	-5379 Feb 09 j 17:35	10° $\mathring{\text{C}}$ 11'04	30.83510 AU	retrograde	-5371 Jun 14 j 19:55	0° $\mathring{\text{A}}$ 43'35	
retrograde	-5379 May 27 j 12:12	12° $\mathring{\text{C}}$ 44'01			-5371 Aug 07 j 10:32	30° $\mathring{\text{R}}$ $\mathring{\text{C}}$	
min. Earth dist.	-5379 Aug 14 j 11:17	11° $\mathring{\text{C}}$ 20'04	28.83480 AU	min. Earth dist.	-5371 Sep 01 j 09:03	29° $\mathring{\text{C}}$ 19'27	28.81412 AU
opposition	-5379 Aug 15 j 07:56	11° $\mathring{\text{C}}$ 18'37	-1°-53'-13	opposition	-5371 Sep 02 j 01:56	29° $\mathring{\text{C}}$ 18'15	-2°-17'-34
direct	-5379 Oct 31 j 11:30	9° $\mathring{\text{C}}$ 55'08		direct	-5371 Nov 18 j 09:45	27° $\mathring{\text{C}}$ 54'13	
conjunction	-5378 Feb 11 j 08:45	12° $\mathring{\text{C}}$ 24'12	-1°-47'-34		-5370 Feb 19 j 06:50	0° $\mathring{\text{A}}$	
minimum elong	-5378 Feb 11 j 08:44	12° $\mathring{\text{C}}$ 24'12	1°47'53	conjunction	-5370 Mar 02 j 00:54	0° $\mathring{\text{A}}$ 24'05	-2°-9'-38
max. Earth dist.	-5378 Feb 12 j 07:48	12° $\mathring{\text{C}}$ 26'22	30.83165 AU	minimum elong	-5370 Mar 02 j 00:54	0° $\mathring{\text{A}}$ 24'05	2°09'56
retrograde	-5378 May 30 j 00:46	14° $\mathring{\text{C}}$ 59'13		max. Earth dist.	-5370 Mar 02 j 18:30	0° $\mathring{\text{A}}$ 25'43	30.81351 AU
opposition	-5378 Aug 17 j 19:30	13° $\mathring{\text{C}}$ 33'50	-1°-56'-55	retrograde	-5370 Jun 17 j 09:15	2° $\mathring{\text{A}}$ 58'34	
min. Earth dist.	-5378 Aug 16 j 23:23	13° $\mathring{\text{C}}$ 35'15	28.83092 AU	opposition	-5370 Sep 04 j 13:05	1° $\mathring{\text{A}}$ 33'19	-2°-19'-43
direct	-5378 Nov 03 j 00:18	12° $\mathring{\text{C}}$ 10'16		min. Earth dist.	-5370 Sep 03 j 21:14	1° $\mathring{\text{A}}$ 34'27	28.81648 AU
conjunction	-5377 Feb 13 j 22:37	14° $\mathring{\text{C}}$ 39'25	-1°-50'-57	direct	-5370 Nov 20 j 20:07	0° $\mathring{\text{A}}$ 09'15	
minimum elong	-5377 Feb 13 j 22:37	14° $\mathring{\text{C}}$ 39'25	1°51'17	conjunction	-5369 Mar 04 j 15:23	2° $\mathring{\text{A}}$ 39'17	-2°-11'-32
max. Earth dist.	-5377 Feb 14 j 19:56	14° $\mathring{\text{C}}$ 41'25	30.82749 AU	minimum elong	-5369 Mar 04 j 15:23	2° $\mathring{\text{A}}$ 39'17	2°11'51
retrograde	-5377 Jun 01 j 15:35	17° $\mathring{\text{C}}$ 14'23		max. Earth dist.	-5369 Mar 05 j 09:26	2° $\mathring{\text{A}}$ 40'58	30.81620 AU
				retrograde	-5369 Jun 19 j 21:51	5° $\mathring{\text{A}}$ 13'43	

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 3

Attention, astronomical year style is used: The year -5369 in astronomical counting style is the year 5370 BCE in historical counting style.

min. Earth dist.	-5369 Sep 06 j 08:49	3° 49 '39	28.81938 AU	opposition	-5361 Sep 24 j 15:15	21° 51 '51	-2°-29'-4
opposition	-5369 Sep 07 j 00:01	3° 48 '34	-2°-21'-38	min. Earth dist.	-5361 Sep 24 j 07:35	21° 52 '24	28.82792 AU
direct	-5369 Nov 23 j 08:03	2° 24 '30		direct	-5361 Dec 11 j 07:44	20° 27 '14	
conjunction	-5368 Mar 06 j 05:53	4° 54 '41	-2°-13'-15	conjunction	-5360 Mar 25 j 03:27	22° 58 '12	-2°-19'-22
minimum elong	-5368 Mar 06 j 05:53	4° 54 '41	2°13'31	minimum elong	-5360 Mar 25 j 03:28	22° 58 '12	2°19'35
max. Earth dist.	-5368 Mar 06 j 21:57	4° 56 '11	30.81921 AU	max. Earth dist.	-5360 Mar 25 j 12:23	22° 59 '02	30.82719 AU
retrograde	-5368 Jun 21 j 12:44	7° 29 '04		retrograde	-5360 Jul 09 j 16:52	25° 31 '34	
opposition	-5368 Sep 08 j 11:06	6° 04 '00	-2°-23'-20	opposition	-5360 Sep 26 j 01:56	24° 06 '46	-2°-28'-58
min. Earth dist.	-5368 Sep 07 j 20:41	6° 05 '01	28.82236 AU	min. Earth dist.	-5360 Sep 25 j 18:43	24° 07 '17	28.83041 AU
direct	-5368 Nov 24 j 19:35	4° 39 '55		direct	-5360 Dec 12 j 19:42	22° 42 '05	
conjunction	-5367 Mar 08 j 20:30	7° 10 '15	-2°-14'-44	conjunction	-5359 Mar 27 j 17:51	25° 13 '07	-2°-19'-11
minimum elong	-5367 Mar 08 j 20:30	7° 10 '15	2°15'02	minimum elong	-5359 Mar 27 j 17:52	25° 13 '07	2°19'24
max. Earth dist.	-5367 Mar 09 j 12:27	7° 11 '44	30.82179 AU	max. Earth dist.	-5359 Mar 28 j 01:00	25° 13 '47	30.83045 AU
retrograde	-5367 Jun 24 j 01:49	9° 44 '34		retrograde	-5359 Jul 12 j 05:37	27° 46 '21	
opposition	-5367 Sep 10 j 22:12	8° 19 '34	-2°-24'-50	opposition	-5359 Sep 28 j 12:34	26° 21 '36	-2°-28'-40
min. Earth dist.	-5367 Sep 10 j 09:16	8° 20 '29	28.82462 AU	min. Earth dist.	-5359 Sep 28 j 05:46	26° 22 '05	28.83445 AU
direct	-5367 Nov 27 j 08:48	6° 55 '27		direct	-5359 Dec 15 j 07:29	24° 56 '52	
conjunction	-5366 Mar 11 j 11:10	9° 25 '55	-2°-16'-2	conjunction	-5358 Mar 30 j 08:33	27° 28 '00	-2°-18'-47
minimum elong	-5366 Mar 11 j 11:10	9° 25 '55	2°16'18	minimum elong	-5358 Mar 30 j 08:33	27° 28 '00	2°18'59
max. Earth dist.	-5366 Mar 12 j 01:12	9° 27 '13	30.82369 AU	max. Earth dist.	-5358 Mar 30 j 16:00	27° 28 '42	30.83517 AU
retrograde	-5366 Jun 26 j 16:06	12° 00 '09			-5358 Jul 06 j 18:00	0° 11 '06	
opposition	-5366 Sep 13 j 09:09	10° 35 '12	-2°-26'-6	retrograde	-5358 Jul 14 j 17:10	0° 11 '06	
min. Earth dist.	-5366 Sep 12 j 20:28	10° 36 '06	28.82607 AU		-5358 Jul 22 j 19:37	30° 00 '00	
direct	-5366 Nov 29 j 21:32	9° 11 '01		opposition	-5358 Sep 30 j 23:09	28° 36 '25	-2°-28'-7
conjunction	-5365 Mar 14 j 01:57	11° 41 '36	-2°-17'-7	min. Earth dist.	-5358 Sep 30 j 17:33	28° 36 '49	28.83981 AU
minimum elong	-5365 Mar 14 j 01:58	11° 41 '36	2°17'23	direct	-5358 Dec 17 j 20:17	27° 11 '39	
max. Earth dist.	-5365 Mar 14 j 15:04	11° 42 '49	30.82456 AU	conjunction	-5357 Apr 01 j 23:12	29° 42 '54	-2°-18'-10
retrograde	-5365 Jun 29 j 04:33	14° 15 '43		minimum elong	-5357 Apr 01 j 23:12	29° 42 '54	2°18'22
opposition	-5365 Sep 15 j 20:15	12° 50 '48	-2°-27'-8	max. Earth dist.	-5357 Apr 02 j 04:57	29° 43 '26	30.84123 AU
min. Earth dist.	-5365 Sep 15 j 09:32	12° 51 '33	28.82652 AU		-5357 Apr 09 j 14:54	0° 11 '06	
direct	-5365 Dec 02 j 09:15	11° 26 '33		retrograde	-5357 Jul 17 j 07:07	2° 15 '52	
conjunction	-5364 Mar 15 j 16:46	13° 57 '13	-2°-17'-59	opposition	-5357 Oct 03 j 09:41	0° 11 '51	-2°-27'-20
minimum elong	-5364 Mar 15 j 16:46	13° 57 '13	2°18'14	min. Earth dist.	-5357 Oct 03 j 04:07	0° 11 '51	28.84625 AU
max. Earth dist.	-5364 Mar 16 j 04:45	13° 58 '20	30.82474 AU		-5357 Nov 04 j 13:48	30° 00 '00	
	-5364 Apr 13 j 11:57	15° 00 '00		direct	-5357 Dec 20 j 08:43	29° 26 '29	
retrograde	-5364 Jun 30 j 18:56	16° 31 '11			-5356 Feb 03 j 10:49	0° 11 '06	
opposition	-5364 Sep 17 j 06:59	15° 06 '17	-2°-27'-57	conjunction	-5356 Apr 03 j 13:58	1° 11 '57	-2°-17'-20
min. Earth dist.	-5364 Sep 16 j 20:20	15° 07 '03	28.82640 AU	minimum elong	-5356 Apr 03 j 13:58	1° 11 '57	2°17'31
	-5364 Sep 20 j 23:25	15° 00 '00		max. Earth dist.	-5356 Apr 03 j 19:12	1° 11 '58	30.84789 AU
direct	-5364 Dec 03 j 22:05	13° 41 '57		retrograde	-5356 Jul 18 j 19:29	4° 11 '30	
	-5363 Feb 12 j 13:06	15° 00 '00		opposition	-5356 Oct 04 j 20:17	3° 11 '06	-2°-26'-20
conjunction	-5363 Mar 18 j 07:27	16° 12 '42	-2°-18'-39	min. Earth dist.	-5356 Oct 04 j 16:37	3° 11 '06	28.85306 AU
minimum elong	-5363 Mar 18 j 07:27	16° 12 '42	2°18'54	direct	-5356 Dec 21 j 20:35	1° 11 '41	
max. Earth dist.	-5363 Mar 18 j 18:03	16° 13 '41	30.82449 AU	conjunction	-5355 Apr 06 j 04:44	4° 11 '25	-2°-16'-18
retrograde	-5363 Jul 03 j 06:10	18° 46 '31		minimum elong	-5355 Apr 06 j 04:45	4° 11 '25	2°16'29
opposition	-5363 Sep 19 j 17:55	17° 21 '38	-2°-28'-33	max. Earth dist.	-5355 Apr 06 j 08:41	4° 11 '31	30.85479 AU
min. Earth dist.	-5363 Sep 19 j 09:03	17° 22 '16	28.82629 AU	retrograde	-5355 Jul 21 j 09:47	6° 45 '37	
direct	-5363 Dec 06 j 08:17	15° 57 '13		opposition	-5355 Oct 07 j 06:50	5° 11 '21	-2°-25'-7
conjunction	-5362 Mar 20 j 22:03	18° 28 '01	-2°-19'-6	min. Earth dist.	-5355 Oct 07 j 03:15	5° 11 '21	28.85974 AU
minimum elong	-5362 Mar 20 j 22:04	18° 28 '01	2°19'20	direct	-5355 Dec 24 j 09:49	3° 11 '56	
max. Earth dist.	-5362 Mar 21 j 08:31	18° 29 '00	30.82459 AU	conjunction	-5354 Apr 08 j 19:26	6° 11 '27	-2°-15'-3
retrograde	-5362 Jul 05 j 17:30	21° 01 '41		minimum elong	-5354 Apr 08 j 19:26	6° 11 '27	2°15'12
opposition	-5362 Sep 22 j 04:36	19° 36 '49	-2°-28'-55	max. Earth dist.	-5354 Apr 08 j 21:54	6° 11 '28	30.86114 AU
min. Earth dist.	-5362 Sep 21 j 19:44	19° 37 '27	28.82660 AU	retrograde	-5354 Jul 23 j 21:23	9° 00 '34	
direct	-5362 Dec 08 j 21:36	18° 12 '18		opposition	-5354 Oct 09 j 17:34	7° 11 '36	-2°-23'-40
conjunction	-5361 Mar 23 j 12:41	20° 43 '11	-2°-19'-20	min. Earth dist.	-5354 Oct 09 j 16:04	7° 11 '36	28.86574 AU
minimum elong	-5361 Mar 23 j 12:41	20° 43 '11	2°19'34	direct	-5354 Dec 26 j 20:43	6° 11 '23	
max. Earth dist.	-5361 Mar 23 j 21:17	20° 43 '59	30.82531 AU	conjunction	-5353 Apr 11 j 10:22	8° 11 '43	-2°-13'-36
retrograde	-5361 Jul 08 j 05:35	23° 16 '42		minimum elong	-5353 Apr 11 j 10:23	8° 11 '43	2°13'45

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Attention, astronomical year style is used: The year -5353 in astronomical counting style is the year 5354 BCE in historical counting style.

max. Earth dist.	-5353 Apr 11 j 12:03	8° ✕ 43'13	30.86675 AU	min. Earth dist.	-5345 Oct 29 j 21:02	27° ✕ 45'55	28.92017 AU
retrograde	-5353 Jul 26 j 09:24	11° ✕ 15'28		direct	-5344 Jan 16 j 11:19	26° ✕ 21'05	
opposition	-5353 Oct 12 j 04:03	9° ✕ 51'13	-2°-22'00				
min. Earth dist.	-5353 Oct 12 j 02:58	9° ✕ 51'17	28.87077 AU	conjunction	-5344 May 01 j 20:20	28° ✕ 53'17	-1°-51'-55
direct	-5353 Dec 29 j 10:04	8° ✕ 26'19		minimum elong	-5344 May 01 j 20:20	28° ✕ 53'18	1°51'58
				max. Earth dist.	-5344 May 01 j 13:34	28° ✕ 52'40	30.92444 AU
conjunction	-5352 Apr 13 j 01:07	10° ✕ 58'04	-2°-11'-57		-5344 Jun 01 j 17:55	0° ∇	
minimum elong	-5352 Apr 13 j 01:08	10° ✕ 58'04	2°12'05	retrograde	-5344 Aug 14 j 18:45	1° ∇ 24'09	
max. Earth dist.	-5352 Apr 13 j 00:33	10° ✕ 58'01	30.87145 AU	opposition	-5344 Oct 31 j 01:22	0° ∇ 00'28	-1°-57'-55
retrograde	-5352 Jul 27 j 21:31	13° ✕ 30'18		min. Earth dist.	-5344 Oct 31 j 07:26	0° ∇ 00'02	28.93103 AU
opposition	-5352 Oct 13 j 14:40	12° ✕ 06'06	-2°-20'-8		-5344 Oct 31 j 08:00	30° ℞ ✕	
min. Earth dist.	-5352 Oct 13 j 15:05	12° ✕ 06'04	28.87519 AU	direct	-5343 Jan 18 j 00:29	28° ✕ 35'14	
direct	-5352 Dec 30 j 20:24	10° ✕ 41'08			-5343 Apr 03 j 02:31	0° ∇	
conjunction	-5351 Apr 15 j 15:44	13° ✕ 12'56	-2°-10'-6	conjunction	-5343 May 04 j 10:21	1° ∇ 07'30	-1°-48'-36
minimum elong	-5351 Apr 15 j 15:45	13° ✕ 12'56	2°10'14	minimum elong	-5343 May 04 j 10:22	1° ∇ 07'30	1°48'38
max. Earth dist.	-5351 Apr 15 j 15:05	13° ✕ 12'53	30.87565 AU	max. Earth dist.	-5343 May 04 j 01:53	1° ∇ 06'43	30.93552 AU
retrograde	-5351 Jul 30 j 07:54	15° ✕ 45'00		retrograde	-5343 Aug 17 j 07:12	3° ∇ 38'13	
opposition	-5351 Oct 16 j 01:09	14° ✕ 20'50	-2°-18'-3	opposition	-5343 Nov 02 j 11:47	2° ∇ 14'39	-1°-54'-17
min. Earth dist.	-5351 Oct 16 j 02:24	14° ✕ 20'45	28.87915 AU	min. Earth dist.	-5343 Nov 02 j 19:10	2° ∇ 14'07	28.94217 AU
direct	-5350 Jan 02 j 08:41	12° ✕ 55'48		direct	-5342 Jan 20 j 10:57	0° ∇ 49'24	
conjunction	-5350 Apr 18 j 06:15	15° ✕ 27'39	-2°-8'-4	conjunction	-5342 May 07 j 00:40	3° ∇ 21'44	-1°-45'-8
minimum elong	-5350 Apr 18 j 06:16	15° ✕ 27'39	2°08'11	minimum elong	-5342 May 07 j 00:41	3° ∇ 21'44	1°45'09
max. Earth dist.	-5350 Apr 18 j 03:25	15° ✕ 27'23	30.87975 AU	max. Earth dist.	-5342 May 06 j 16:01	3° ∇ 20'56	30.94651 AU
retrograde	-5350 Aug 01 j 19:30	17° ✕ 59'32		retrograde	-5342 Aug 19 j 17:03	5° ∇ 52'18	
opposition	-5350 Oct 18 j 11:26	16° ✕ 35'24	-2°-15'-46	opposition	-5342 Nov 04 j 22:05	4° ∇ 28'50	-1°-50'-29
min. Earth dist.	-5350 Oct 18 j 13:27	16° ✕ 35'15	28.88340 AU	min. Earth dist.	-5342 Nov 05 j 06:29	4° ∇ 28'14	28.95273 AU
direct	-5349 Jan 04 j 20:32	15° ✕ 10'18		direct	-5341 Jan 22 j 23:32	3° ∇ 03'35	
conjunction	-5349 Apr 20 j 20:54	17° ✕ 42'12	-2°-5'-50	conjunction	-5341 May 09 j 14:53	5° ∇ 35'57	-1°-41'-30
minimum elong	-5349 Apr 20 j 20:54	17° ✕ 42'12	2°05'56	minimum elong	-5341 May 09 j 14:53	5° ∇ 35'57	1°41'30
max. Earth dist.	-5349 Apr 20 j 18:12	17° ✕ 41'57	30.88422 AU	max. Earth dist.	-5341 May 09 j 03:50	5° ∇ 34'56	30.95676 AU
retrograde	-5349 Aug 04 j 05:50	20° ✕ 13'53		retrograde	-5341 Aug 22 j 04:18	8° ∇ 06'20	
opposition	-5349 Oct 20 j 21:52	18° ✕ 49'48	-2°-13'-17	opposition	-5341 Nov 07 j 08:33	6° ∇ 42'57	-1°-46'-31
min. Earth dist.	-5349 Oct 21 j 01:13	18° ✕ 49'34	28.88815 AU	min. Earth dist.	-5341 Nov 07 j 17:46	6° ∇ 42'18	28.96253 AU
direct	-5348 Jan 07 j 09:22	17° ✕ 24'38		direct	-5340 Jan 25 j 10:57	5° ∇ 17'41	
conjunction	-5348 Apr 22 j 11:12	19° ✕ 56'34	-2°-3'-25	conjunction	-5340 May 11 j 05:04	7° ∇ 50'05	-1°-37'-43
minimum elong	-5348 Apr 22 j 11:13	19° ✕ 56'34	2°03'30	minimum elong	-5340 May 11 j 05:04	7° ∇ 50'05	1°37'43
max. Earth dist.	-5348 Apr 22 j 06:46	19° ✕ 56'10	30.88955 AU	max. Earth dist.	-5340 May 10 j 17:58	7° ∇ 49'03	30.96604 AU
retrograde	-5348 Aug 05 j 18:32	22° ✕ 28'05		retrograde	-5340 Aug 23 j 14:02	10° ∇ 20'17	
opposition	-5348 Oct 22 j 08:07	21° ✕ 04'03	-2°-10'-36	opposition	-5340 Nov 08 j 19:03	8° ∇ 56'57	-1°-42'-24
min. Earth dist.	-5348 Oct 22 j 11:18	21° ✕ 03'49	28.89404 AU	min. Earth dist.	-5340 Nov 09 j 05:52	8° ∇ 56'11	28.97126 AU
direct	-5347 Jan 08 j 21:37	19° ✕ 38'49		direct	-5339 Jan 26 j 23:00	7° ∇ 31'39	
conjunction	-5347 Apr 25 j 01:34	22° ✕ 10'49	-2°00'-48	conjunction	-5339 May 13 j 19:00	10° ∇ 04'03	-1°-33'-47
minimum elong	-5347 Apr 25 j 01:35	22° ✕ 10'49	2°00'54	minimum elong	-5339 May 13 j 19:01	10° ∇ 04'03	1°33'47
max. Earth dist.	-5347 Apr 24 j 21:00	22° ✕ 10'24	30.89609 AU	max. Earth dist.	-5339 May 13 j 05:49	10° ∇ 02'49	30.97454 AU
retrograde	-5347 Aug 08 j 05:56	24° ✕ 42'10		retrograde	-5339 Aug 26 j 01:51	12° ∇ 34'03	
opposition	-5347 Oct 24 j 18:30	23° ✕ 18'11	-2°-7'-43	opposition	-5339 Nov 11 j 05:19	11° ∇ 10'46	-1°-38'-8
min. Earth dist.	-5347 Oct 24 j 23:10	23° ✕ 17'51	28.90132 AU	min. Earth dist.	-5339 Nov 11 j 16:15	11° ∇ 10'00	28.97938 AU
direct	-5346 Jan 11 j 10:10	21° ✕ 52'56		direct	-5338 Jan 29 j 11:05	9° ∇ 45'24	
conjunction	-5346 Apr 27 j 15:44	24° ✕ 24'59	-1°-58'-1	conjunction	-5338 May 16 j 08:57	12° ∇ 17'48	-1°-29'-44
minimum elong	-5346 Apr 27 j 15:45	24° ✕ 24'59	1°58'05	minimum elong	-5338 May 16 j 08:58	12° ∇ 17'48	1°29'43
max. Earth dist.	-5346 Apr 27 j 10:09	24° ✕ 24'28	30.90428 AU	max. Earth dist.	-5338 May 15 j 19:26	12° ∇ 16'33	30.98239 AU
retrograde	-5346 Aug 10 j 19:13	26° ✕ 56'09		retrograde	-5338 Aug 28 j 11:53	14° ∇ 47'37	
opposition	-5346 Oct 27 j 04:44	25° ✕ 32'16	-2°-4'-38	opposition	-5338 Nov 13 j 15:46	13° ∇ 24'22	-1°-33'-44
min. Earth dist.	-5346 Oct 27 j 09:04	25° ✕ 31'57	28.91009 AU	min. Earth dist.	-5338 Nov 14 j 04:32	13° ∇ 23'28	28.98702 AU
direct	-5345 Jan 14 j 00:07	24° ✕ 07'00		direct	-5337 Feb 01 j 00:08	11° ∇ 58'57	
conjunction	-5345 Apr 30 j 06:02	26° ✕ 39'08	-1°-55'-3	conjunction	-5337 May 18 j 22:42	14° ∇ 31'21	-1°-25'-33
minimum elong	-5345 Apr 30 j 06:03	26° ✕ 39'08	1°55'07	minimum elong	-5337 May 18 j 22:43	14° ∇ 31'21	1°25'30
max. Earth dist.	-5345 Apr 29 j 23:37	26° ✕ 38'32	30.91375 AU	max. Earth dist.	-5337 May 18 j 07:50	14° ∇ 29'58	30.99010 AU
retrograde	-5345 Aug 13 j 06:22	29° ✕ 10'08		retrograde	-5337 Aug 30 j 23:48	17° ∇ 00'57	
opposition	-5345 Oct 29 j 15:03	27° ✕ 46'21	-2°-1'-22	opposition	-5337 Nov 16 j 01:58	15° ∇ 37'44	-1°-29'-11

Attention, astronomical year style is used: The year -5337 in astronomical counting style is the year 5338 BCE in historical counting style.

min. Earth dist.	-5337 Nov 16 j 14:32	15° Υ 36'51	28.99468 AU	retrograde	-5329 Sep 17 j 12:45	4° 8 44'12	
direct	-5336 Feb 03 j 14:18	14° Υ 12'17		opposition	-5329 Dec 03 j 13:15	3° 8 21'41	0°-48'-47
				min. Earth dist.	-5329 Dec 04 j 07:41	3° 8 20'23	29.08256 AU
conjunction	-5336 May 20 j 12:21	16° Υ 44'40	-1°-21'-15	direct	-5328 Feb 21 j 13:45	1° 8 56'20	
minimum elong	-5336 May 20 j 12:21	16° Υ 44'40	1°21'12				
max. Earth dist.	-5336 May 19 j 20:50	16° Υ 43'14	30.99797 AU	conjunction	-5328 Jun 07 j 22:04	4° 8 28'51	0°-43'-4
retrograde	-5336 Sep 01 j 10:27	19° Υ 14'05		minimum elong	-5328 Jun 07 j 22:05	4° 8 28'51	0°42'56
opposition	-5336 Nov 17 j 12:26	17° Υ 50'54	-1°-24'-31	max. Earth dist.	-5328 Jun 07 j 01:06	4° 8 26'54	31.08742 AU
min. Earth dist.	-5336 Nov 18 j 02:29	17° Υ 49'55	29.00292 AU	retrograde	-5328 Sep 19 j 00:22	6° 8 57'09	
direct	-5335 Feb 05 j 01:59	16° Υ 25'25		opposition	-5328 Dec 04 j 23:49	5° 8 34'42	0°-43'-20
max. Earth dist.	-5335 May 22 j 10:01	18° Υ 56'20	31.00672 AU	min. Earth dist.	-5328 Dec 05 j 18:05	5° 8 33'25	29.09267 AU
				direct	-5327 Feb 23 j 03:12	4° 8 09'21	
conjunction	-5335 May 23 j 01:41	18° Υ 57'47	-1°-16'-49				
minimum elong	-5335 May 23 j 01:42	18° Υ 57'47	1°16'45	conjunction	-5327 Jun 10 j 10:54	6° 8 41'51	0°-37'-57
retrograde	-5335 Sep 03 j 22:01	21° Υ 27'01		minimum elong	-5327 Jun 10 j 10:55	6° 8 41'51	0°37'47
opposition	-5335 Nov 19 j 22:43	20° Υ 03'54	-1°-19'-44	max. Earth dist.	-5327 Jun 09 j 13:12	6° 8 39'50	31.09690 AU
min. Earth dist.	-5335 Nov 20 j 12:34	20° Υ 02'55	29.01204 AU	retrograde	-5327 Sep 21 j 10:54	9° 8 10'01	
direct	-5334 Feb 07 j 15:56	18° Υ 38'23		opposition	-5327 Dec 07 j 10:30	7° 8 47'36	0°-37'-49
				min. Earth dist.	-5327 Dec 08 j 06:27	7° 8 46'12	29.10161 AU
conjunction	-5334 May 25 j 15:02	21° Υ 10'46	-1°-12'-17	direct	-5326 Feb 25 j 14:50	6° 8 22'14	
minimum elong	-5334 May 25 j 15:03	21° Υ 10'46	1°12'13				
max. Earth dist.	-5334 May 24 j 22:07	21° Υ 09'12	31.01645 AU	conjunction	-5326 Jun 12 j 23:45	8° 8 54'41	0°-32'-46
retrograde	-5334 Sep 06 j 09:41	23° Υ 39'50		minimum elong	-5326 Jun 12 j 23:45	8° 8 54'41	0°32'37
opposition	-5334 Nov 22 j 08:58	22° Υ 16'48	-1°-14'-50	max. Earth dist.	-5326 Jun 12 j 01:33	8° 8 52'38	31.10535 AU
min. Earth dist.	-5334 Nov 22 j 23:39	22° Υ 15'46	29.02244 AU	retrograde	-5326 Sep 23 j 22:22	11° 8 22'41	
direct	-5333 Feb 10 j 03:06	20° Υ 51'17		opposition	-5326 Dec 09 j 20:57	10° 8 00'18	0°-32'-16
max. Earth dist.	-5333 May 27 j 11:55	23° Υ 22'09	31.02751 AU	min. Earth dist.	-5326 Dec 10 j 17:00	9° 8 58'54	29.10947 AU
				direct	-5325 Feb 28 j 05:42	8° 8 34'54	
conjunction	-5333 May 28 j 04:29	23° Υ 23'41	-1°-7'-39				
minimum elong	-5333 May 28 j 04:29	23° Υ 23'41	1°07'34	conjunction	-5325 Jun 15 j 12:25	11° 8 07'19	0°-27'-33
retrograde	-5333 Sep 08 j 19:08	25° Υ 52'36		minimum elong	-5325 Jun 15 j 12:25	11° 8 07'19	0°27'23
opposition	-5333 Nov 24 j 19:23	24° Υ 29'40	-1°-9'-49	max. Earth dist.	-5325 Jun 14 j 12:55	11° 8 05'09	31.11289 AU
min. Earth dist.	-5333 Nov 25 j 10:30	24° Υ 28'36	29.03391 AU	retrograde	-5325 Sep 26 j 09:50	13° 8 35'09	
direct	-5332 Feb 12 j 16:01	23° Υ 04'11		opposition	-5325 Dec 12 j 07:35	12° 8 12'47	0°-26'-41
				min. Earth dist.	-5325 Dec 13 j 04:30	12° 8 11'19	29.11686 AU
conjunction	-5332 May 29 j 17:32	25° Υ 36'36	-1°-2'-54	direct	-5324 Mar 01 j 18:13	10° 8 47'21	
minimum elong	-5332 May 29 j 17:33	25° Υ 36'36	1°02'49	max. Earth dist.	-5324 Jun 16 j 01:46	13° 8 17'34	31.12016 AU
max. Earth dist.	-5332 May 28 j 23:23	25° Υ 34'55	31.03957 AU				
retrograde	-5332 Sep 10 j 06:04	28° Υ 05'24		conjunction	-5324 Jun 17 j 00:48	13° 8 19'42	0°-22'-19
opposition	-5332 Nov 26 j 05:45	26° Υ 42'35	-1°-4'-41	minimum elong	-5324 Jun 17 j 00:48	13° 8 19'42	0°22'08
min. Earth dist.	-5332 Nov 26 j 21:06	26° Υ 41'30	29.04636 AU		-5324 Aug 05 j 03:47	15° 8	
direct	-5331 Feb 14 j 02:45	25° Υ 17'08		retrograde	-5324 Sep 27 j 18:33	15° 8 47'22	
					-5324 Nov 22 j 04:38	15° 8	
conjunction	-5331 Jun 01 j 06:48	27° Υ 49'36	0°-58'-4	opposition	-5324 Dec 13 j 18:12	14° 8 25'01	0°-21'-3
minimum elong	-5331 Jun 01 j 06:48	27° Υ 49'36	0°57'57	min. Earth dist.	-5324 Dec 14 j 15:31	14° 8 23'32	29.12406 AU
max. Earth dist.	-5331 May 31 j 13:11	27° Υ 47'58	31.05224 AU	direct	-5323 Mar 04 j 07:52	12° 8 59'33	
	-5331 Aug 10 j 23:18	0° 8			-5323 Jun 05 j 04:12	15° 8	
retrograde	-5331 Sep 12 j 15:39	0° 8 18'16					
	-5331 Oct 15 j 20:49	30° R Υ		conjunction	-5323 Jun 19 j 12:59	15° 8 31'50	0°-17'-3
opposition	-5331 Nov 28 j 16:09	28° Υ 55'34	0°-59'-28	minimum elong	-5323 Jun 19 j 12:59	15° 8 31'50	0°16'51
min. Earth dist.	-5331 Nov 29 j 08:53	28° Υ 54'23	29.05901 AU	max. Earth dist.	-5323 Jun 18 j 12:34	15° 8 29'34	31.12757 AU
direct	-5330 Feb 16 j 13:45	27° Υ 30'10		retrograde	-5323 Sep 30 j 05:09	17° 8 59'20	
	-5330 Jun 02 j 15:19	0° 8		opposition	-5323 Dec 16 j 04:37	16° 8 37'00	0°-15'-24
				min. Earth dist.	-5323 Dec 17 j 01:53	16° 8 35'31	29.13185 AU
conjunction	-5330 Jun 03 j 19:52	0° 8 02'39	0°-53'-8	direct	-5322 Mar 06 j 19:30	15° 8 11'30	
minimum elong	-5330 Jun 03 j 19:53	0° 8 02'39	0°53'01	max. Earth dist.	-5322 Jun 21 j 01:43	17° 8 41'33	31.13569 AU
max. Earth dist.	-5330 Jun 03 j 00:27	0° 8 00'51	31.06486 AU				
retrograde	-5330 Sep 15 j 03:08	2° 8 31'13		conjunction	-5322 Jun 22 j 01:12	17° 8 43'44	0°-11'-46
opposition	-5330 Dec 01 j 02:35	1° 8 08'37	0°-54'-10	minimum elong	-5322 Jun 22 j 01:12	17° 8 43'44	0°11'34
min. Earth dist.	-5330 Dec 01 j 19:14	1° 8 07'27	29.07129 AU	behind sun begin	-5322 Jun 21 j 20:33	17° 8 43'19	
	-5329 Jan 17 j 12:43	30° R Υ		behind sun end	-5322 Jun 22 j 05:50	17° 8 44'09	
direct	-5329 Feb 19 j 01:07	29° Υ 43'14		retrograde	-5322 Oct 02 j 13:58	20° 8 11'05	
	-5329 Mar 23 j 08:50	0° 8		opposition	-5322 Dec 18 j 15:18	18° 8 48'47	0°-9'-44
				min. Earth dist.	-5322 Dec 19 j 13:25	18° 8 47'14	29.14040 AU
conjunction	-5329 Jun 06 j 09:04	2° 8 15'46	0°-48'-8	direct	-5321 Mar 09 j 07:25	17° 8 23'16	
minimum elong	-5329 Jun 06 j 09:05	2° 8 15'46	0°48'00				
max. Earth dist.	-5329 Jun 05 j 13:32	2° 8 13'57	31.07664 AU	conjunction	-5321 Jun 24 j 13:05	19° 8 55'26	0°-6'-29

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 6

Attention, astronomical year style is used: The year -5321 in astronomical counting style is the year 5322 BCE in historical counting style.

minimum elong	-5321 Jun 24 j 13:05	19°8'55"26	0°06'16	direct	-5314 Mar 24 j 20:50	2°II44'53	
behind sun begin	-5321 Jun 24 j 06:54	19°8'54'54					
behind sun end	-5321 Jun 24 j 19:16	19°8'55'59		conjunction	-5314 Jul 09 j 22:46	5°II16'50	0°30'32
max. Earth dist.	-5321 Jun 23 j 12:32	19°8'53'10	31.14484 AU	minimum elong	-5314 Jul 09 j 22:46	5°II16'50	0°30'47
retrograde	-5321 Oct 05 j 00:07	22°8'22'41		max. Earth dist.	-5314 Jul 08 j 20:09	5°II14'22	31.21507 AU
opposition	-5321 Dec 21 j 01:53	21°8'00'25	0°-4'-4	retrograde	-5314 Oct 20 j 01:02	7°II43'31	
min. Earth dist.	-5321 Dec 21 j 23:08	20°8'58'56	29.15012 AU	opposition	-5313 Jan 05 j 05:53	6°II21'40	0°35'19
direct	-5320 Mar 10 j 19:05	19°8'34'55		min. Earth dist.	-5313 Jan 06 j 05:40	6°II20'02	29.21890 AU
max. Earth dist.	-5320 Jun 25 j 01:14	22°8'04'51	31.15507 AU	direct	-5313 Mar 27 j 09:01	4°II56'25	
				max. Earth dist.	-5313 Jul 11 j 08:24	7°II25'55	31.22157 AU
conjunction	-5320 Jun 26 j 01:04	22°8'07'04	0°-1'-8				
minimum elong	-5320 Jun 26 j 01:03	22°8'07'04	0°00'56	conjunction	-5313 Jul 12 j 10:08	7°II28'18	0°35'41
behind sun begin	-5320 Jun 25 j 18:31	22°8'06'29		minimum elong	-5313 Jul 12 j 10:07	7°II28'18	0°35'58
behind sun end	-5320 Jun 26 j 07:34	22°8'07'38		retrograde	-5313 Oct 22 j 09:58	9°II54'54	
asc. node	-5320 Sep 10 j 22:51	24°8'22'59		opposition	-5312 Jan 07 j 17:01	8°II33'03	0°40'47
retrograde	-5320 Oct 06 j 08:46	24°8'34'12		min. Earth dist.	-5312 Jan 08 j 17:48	8°II31'21	29.22496 AU
opposition	-5320 Dec 22 j 12:38	23°8'12'00	0°01'36	direct	-5312 Mar 28 j 21:35	7°II07'49	
min. Earth dist.	-5320 Dec 23 j 10:57	23°8'10'27	29.16087 AU				
direct	-5319 Mar 13 j 06:18	21°8'46'33		conjunction	-5312 Jul 13 j 21:11	9°II39'36	0°40'46
				minimum elong	-5312 Jul 13 j 21:11	9°II39'36	0°41'02
conjunction	-5319 Jun 28 j 12:41	24°8'18'39	0°04'17	max. Earth dist.	-5312 Jul 12 j 18:26	9°II37'07	31.22736 AU
minimum elong	-5319 Jun 28 j 12:41	24°8'18'39	0°04'31	retrograde	-5312 Oct 23 j 19:45	12°II06'07	
behind sun begin	-5319 Jun 28 j 06:17	24°8'18'05		opposition	-5311 Jan 09 j 03:57	10°II44'16	0°46'12
behind sun end	-5319 Jun 28 j 19:05	24°8'19'13		min. Earth dist.	-5311 Jan 10 j 03:51	10°II42'38	29.23062 AU
max. Earth dist.	-5319 Jun 27 j 12:16	24°8'16'23	31.16626 AU	direct	-5311 Mar 31 j 09:34	9°II19'01	
retrograde	-5319 Oct 08 j 19:39	26°8'45'42		max. Earth dist.	-5311 Jul 15 j 06:13	11°II48'19	31.23286 AU
opposition	-5319 Dec 24 j 23:16	25°8'23'35	0°07'17				
min. Earth dist.	-5319 Dec 25 j 20:53	25°8'22'05	29.17216 AU	conjunction	-5311 Jul 16 j 08:09	11°II50'44	0°45'48
direct	-5318 Mar 15 j 18:21	23°8'58'10		minimum elong	-5311 Jul 16 j 08:08	11°II50'44	0°46'05
max. Earth dist.	-5318 Jun 29 j 23:56	26°8'27'59	31.17754 AU	retrograde	-5311 Oct 26 j 03:48	14°II17'09	
				opposition	-5310 Jan 11 j 15:05	12°II55'18	0°51'32
conjunction	-5318 Jul 01 j 00:30	26°8'30'16	0°09'34	min. Earth dist.	-5310 Jan 12 j 15:55	12°II53'36	29.23626 AU
minimum elong	-5318 Jul 01 j 00:30	26°8'30'16	0°09'48	direct	-5310 Apr 02 j 20:47	11°II30'03	
behind sun begin	-5318 Jun 30 j 19:10	26°8'29'48					
behind sun end	-5318 Jul 01 j 05:49	26°8'30'44		conjunction	-5310 Jul 18 j 18:53	14°II01'40	0°50'45
retrograde	-5318 Oct 11 j 06:00	28°8'57'15		minimum elong	-5310 Jul 18 j 18:53	14°II01'40	0°51'02
opposition	-5318 Dec 27 j 10:03	27°8'35'12	0°12'57	max. Earth dist.	-5310 Jul 17 j 16:43	13°II59'13	31.23871 AU
min. Earth dist.	-5318 Dec 28 j 08:56	27°8'33'37	29.18343 AU	retrograde	-5310 Oct 28 j 13:44	16°II28'01	
direct	-5317 Mar 18 j 05:16	26°8'09'51		opposition	-5309 Jan 14 j 02:03	15°II06'11	0°56'47
max. Earth dist.	-5317 Jul 02 j 11:40	28°8'39'38	31.18854 AU	min. Earth dist.	-5309 Jan 15 j 01:42	15°II04'33	29.24243 AU
				direct	-5309 Apr 05 j 08:09	13°II40'55	
conjunction	-5317 Jul 03 j 12:14	28°8'41'55	0°14'51	max. Earth dist.	-5309 Jul 20 j 03:52	16°II10'04	31.24526 AU
minimum elong	-5317 Jul 03 j 12:14	28°8'41'55	0°15'06				
behind sun begin	-5317 Jul 03 j 10:04	28°8'41'44		conjunction	-5309 Jul 21 j 05:37	16°II12'28	0°55'37
behind sun end	-5317 Jul 03 j 14:24	28°8'42'07		minimum elong	-5309 Jul 21 j 05:36	16°II12'28	0°55'55
	-5317 Aug 09 j 04:28	0°II		retrograde	-5309 Oct 30 j 23:40	18°II38'46	
retrograde	-5317 Oct 13 j 17:13	1°II08'50		opposition	-5308 Jan 16 j 13:18	17°II16'56	1°01'57
	-5317 Dec 21 j 22:34	30°R8		min. Earth dist.	-5308 Jan 17 j 13:26	17°II15'17	29.24968 AU
opposition	-5317 Dec 29 j 20:59	29°8'46'52	0°18'36	direct	-5308 Apr 06 j 18:57	15°II51'43	
min. Earth dist.	-5317 Dec 30 j 19:39	29°8'45'18	29.19397 AU				
direct	-5316 Mar 19 j 19:27	28°8'21'34		conjunction	-5308 Jul 22 j 16:05	18°II23'11	1°00'25
	-5316 Jun 10 j 11:37	0°II		minimum elong	-5308 Jul 22 j 16:04	18°II23'11	1°00'42
conjunction	-5316 Jul 04 j 23:43	0°II53'36	0°20'07	max. Earth dist.	-5308 Jul 21 j 15:10	18°II20'51	31.25305 AU
minimum elong	-5316 Jul 04 j 23:43	0°II53'36	0°20'21	retrograde	-5308 Nov 01 j 10:17	20°II49'27	
max. Earth dist.	-5316 Jul 03 j 22:10	0°II51'14	31.19854 AU	opposition	-5307 Jan 18 j 00:27	19°II27'39	1°07'02
retrograde	-5316 Oct 15 j 04:49	3°II20'27		min. Earth dist.	-5307 Jan 18 j 23:39	19°II26'04	29.25793 AU
opposition	-5316 Dec 31 j 07:59	1°II58'32	0°24'13	direct	-5307 Apr 09 j 08:24	18°II02'29	
min. Earth dist.	-5315 Jan 01 j 07:17	1°II56'55	29.20356 AU	max. Earth dist.	-5307 Jul 24 j 01:21	20°II31'32	31.26175 AU
direct	-5315 Mar 22 j 07:26	0°II33'15					
max. Earth dist.	-5315 Jul 06 j 10:14	3°II02'55	31.20746 AU	conjunction	-5307 Jul 25 j 02:33	20°II33'54	1°05'08
				minimum elong	-5307 Jul 25 j 02:33	20°II33'54	1°05'26
conjunction	-5315 Jul 07 j 11:21	3°II05'15	0°25'21	retrograde	-5307 Nov 03 j 21:46	23°II00'09	
minimum elong	-5315 Jul 07 j 11:21	3°II05'15	0°25'36	opposition	-5306 Jan 20 j 11:31	21°II38'23	1°12'01
retrograde	-5315 Oct 17 j 13:58	5°II32'01		min. Earth dist.	-5306 Jan 21 j 10:40	21°II36'48	29.26710 AU
opposition	-5314 Jan 02 j 18:53	4°II10'09	0°29'48	direct	-5306 Apr 11 j 19:16	20°II13'17	
min. Earth dist.	-5314 Jan 03 j 18:43	4°II08'30	29.21179 AU	conjunction	-5306 Jul 27 j 13:06	22°II44'39	1°09'45

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Attention, astronomical year style is used: The year -5306 in astronomical counting style is the year 5307 BCE in historical counting style.

minimum elong	-5306 Jul 27 j 13:05	22°II44'39	1°10'02	minimum elong	-5298 Aug 13 j 22:08	10°☾10'26	1°42'49
max. Earth dist.	-5306 Jul 26 j 13:04	22°II42'25	31.27106 AU	max. Earth dist.	-5298 Aug 12 j 22:51	10°☾08'15	31.31503 AU
retrograde	-5306 Nov 06 j 07:14	25°II10'55		retrograde	-5298 Nov 23 j 16:29	12°☾36'38	
opposition	-5305 Jan 22 j 22:53	23°II49'12	1°16'54	opposition	-5297 Feb 09 j 20:01	11°☾14'53	1°51'22
min. Earth dist.	-5305 Jan 23 j 22:02	23°II47'37	29.27642 AU	min. Earth dist.	-5297 Feb 10 j 17:43	11°☾13'25	29.31745 AU
direct	-5305 Apr 14 j 08:06	22°II24'10		direct	-5297 May 02 j 07:07	9°☾50'05	
				max. Earth dist.	-5297 Aug 15 j 10:10	12°☾18'37	31.31746 AU
conjunction	-5305 Jul 29 j 23:19	24°II55'29	1°14'16	conjunction	-5297 Aug 16 j 07:45	12°☾20'38	1°46'01
minimum elong	-5305 Jul 29 j 23:19	24°II55'29	1°14'35	minimum elong	-5297 Aug 16 j 07:45	12°☾20'38	1°46'19
max. Earth dist.	-5305 Jul 28 j 22:28	24°II53'10	31.28025 AU	retrograde	-5297 Nov 26 j 01:51	14°☾46'51	
retrograde	-5305 Nov 08 j 19:10	27°II21'44		opposition	-5296 Feb 12 j 07:56	13°☾25'05	1°55'01
opposition	-5304 Jan 25 j 10:18	26°II00'05	1°21'40	min. Earth dist.	-5296 Feb 13 j 05:04	13°☾23'39	29.32019 AU
min. Earth dist.	-5304 Jan 26 j 08:53	25°II58'32	29.28548 AU	direct	-5296 May 03 j 20:08	12°☾00'19	
direct	-5304 Apr 15 j 20:34	24°II35'07					
max. Earth dist.	-5304 Jul 30 j 10:08	27°II04'10	31.28881 AU	conjunction	-5296 Aug 17 j 17:16	14°☾30'47	1°49'21
				minimum elong	-5296 Aug 17 j 17:15	14°☾30'47	1°49'38
conjunction	-5304 Jul 31 j 09:46	27°II06'23	1°18'40	max. Earth dist.	-5296 Aug 16 j 19:20	14°☾28'43	31.32060 AU
minimum elong	-5304 Jul 31 j 09:45	27°II06'23	1°18'58	retrograde	-5296 Nov 27 j 13:49	16°☾57'01	
retrograde	-5304 Nov 10 j 04:43	29°II32'38		opposition	-5295 Feb 13 j 19:38	15°☾35'14	1°58'30
opposition	-5303 Jan 26 j 21:52	28°II11'00	1°26'19	min. Earth dist.	-5295 Feb 14 j 15:32	15°☾33'53	29.32390 AU
min. Earth dist.	-5303 Jan 27 j 21:15	28°II09'24	29.29361 AU	direct	-5295 May 06 j 08:08	14°☾10'32	
direct	-5303 Apr 18 j 09:17	26°II46'06		max. Earth dist.	-5295 Aug 19 j 06:43	16°☾39'03	31.32459 AU
conjunction	-5303 Aug 02 j 19:58	29°II17'17	1°22'58	conjunction	-5295 Aug 20 j 02:52	16°☾40'56	1°52'31
minimum elong	-5303 Aug 02 j 19:58	29°II17'17	1°23'17	minimum elong	-5295 Aug 20 j 02:51	16°☾40'56	1°52'50
max. Earth dist.	-5303 Aug 01 j 19:29	29°II14'59	31.29632 AU	retrograde	-5295 Nov 29 j 23:41	19°☾07'14	
	-5303 Aug 22 j 02:22	0°☾		opposition	-5294 Feb 16 j 07:36	17°☾45'28	2°01'49
retrograde	-5303 Nov 12 j 14:53	1°☾43'31		min. Earth dist.	-5294 Feb 17 j 03:39	17°☾44'06	29.32821 AU
opposition	-5302 Jan 29 j 09:23	0°☾21'55	1°30'50	direct	-5294 May 08 j 20:36	16°☾20'51	
min. Earth dist.	-5302 Jan 30 j 07:46	0°☾20'23	29.30048 AU				
	-5302 Feb 11 j 22:25	30°R II		conjunction	-5294 Aug 22 j 12:13	18°☾51'10	1°55'32
direct	-5302 Apr 20 j 21:22	28°II57'03		minimum elong	-5294 Aug 22 j 12:12	18°☾51'10	1°55'50
	-5302 Jun 24 j 07:24	0°☾		max. Earth dist.	-5294 Aug 21 j 16:00	18°☾49'16	31.32918 AU
max. Earth dist.	-5302 Aug 04 j 06:30	1°☾25'56	31.30231 AU	retrograde	-5294 Dec 02 j 10:05	21°☾17'32	
				opposition	-5293 Feb 18 j 19:30	19°☾55'48	2°04'57
conjunction	-5302 Aug 05 j 06:18	1°☾28'09	1°27'09	min. Earth dist.	-5293 Feb 19 j 13:54	19°☾54'33	29.33293 AU
minimum elong	-5302 Aug 05 j 06:17	1°☾28'09	1°27'26	direct	-5293 May 11 j 08:21	18°☾31'16	
retrograde	-5302 Nov 14 j 23:25	3°☾54'23					
opposition	-5301 Jan 31 j 21:09	2°☾32'46	1°35'14	conjunction	-5293 Aug 24 j 21:43	21°☾01'33	1°58'24
min. Earth dist.	-5301 Feb 01 j 20:30	2°☾31'11	29.30585 AU	minimum elong	-5293 Aug 24 j 21:43	21°☾01'33	1°58'42
direct	-5301 Apr 23 j 08:51	1°☾07'57		max. Earth dist.	-5293 Aug 24 j 02:44	20°☾59'46	31.33379 AU
				retrograde	-5293 Dec 04 j 19:18	23°☾28'00	
conjunction	-5301 Aug 07 j 16:28	3°☾38'57	1°31'12	opposition	-5292 Feb 21 j 07:42	22°☾06'17	2°07'55
minimum elong	-5301 Aug 07 j 16:27	3°☾38'57	1°31'30	min. Earth dist.	-5292 Feb 22 j 02:34	22°☾05'00	29.33751 AU
max. Earth dist.	-5301 Aug 06 j 16:24	3°☾36'41	31.30701 AU	direct	-5292 May 12 j 19:34	20°☾41'51	
retrograde	-5301 Nov 17 j 09:32	6°☾05'09					
opposition	-5300 Feb 03 j 08:51	4°☾43'32	1°39'30	conjunction	-5292 Aug 26 j 07:01	23°☾12'03	2°01'05
min. Earth dist.	-5300 Feb 04 j 07:06	4°☾42'01	29.30987 AU	minimum elong	-5292 Aug 26 j 07:00	23°☾12'03	2°01'21
direct	-5300 Apr 24 j 20:44	3°☾18'43		max. Earth dist.	-5292 Aug 25 j 12:22	23°☾10'18	31.33807 AU
max. Earth dist.	-5300 Aug 08 j 02:34	5°☾47'22	31.31035 AU	retrograde	-5292 Dec 06 j 05:46	25°☾38'36	
				opposition	-5291 Feb 22 j 19:48	24°☾16'54	2°10'41
conjunction	-5300 Aug 09 j 02:26	5°☾49'36	1°35'07	min. Earth dist.	-5291 Feb 23 j 13:15	24°☾15'43	29.34132 AU
minimum elong	-5300 Aug 09 j 02:25	5°☾49'36	1°35'24	direct	-5291 May 15 j 07:07	22°☾52'33	
retrograde	-5300 Nov 18 j 19:19	8°☾15'48					
opposition	-5299 Feb 04 j 20:38	6°☾54'09	1°43'36	conjunction	-5291 Aug 28 j 16:28	25°☾22'41	2°03'35
min. Earth dist.	-5299 Feb 05 j 19:33	6°☾52'35	29.31286 AU	minimum elong	-5291 Aug 28 j 16:28	25°☾22'41	2°03'52
direct	-5299 Apr 27 j 07:39	5°☾29'20		max. Earth dist.	-5291 Aug 27 j 22:02	25°☾20'57	31.34123 AU
				retrograde	-5291 Dec 08 j 15:57	27°☾49'19	
conjunction	-5299 Aug 11 j 12:23	8°☾00'06	1°38'53	opposition	-5290 Feb 25 j 07:58	26°☾27'37	2°13'16
minimum elong	-5299 Aug 11 j 12:22	8°☾00'06	1°39'12	min. Earth dist.	-5290 Feb 26 j 01:56	26°☾26'24	29.34399 AU
max. Earth dist.	-5299 Aug 10 j 13:19	7°☾57'56	31.31292 AU	direct	-5290 May 17 j 17:32	25°☾03'19	
retrograde	-5299 Nov 21 j 05:11	10°☾26'17		max. Earth dist.	-5290 Aug 30 j 08:30	27°☾31'44	31.34314 AU
opposition	-5298 Feb 07 j 08:12	9°☾04'35	1°47'34				
min. Earth dist.	-5298 Feb 08 j 06:18	9°☾03'05	29.31511 AU	conjunction	-5290 Aug 31 j 01:56	27°☾33'23	2°05'55
direct	-5298 Apr 29 j 20:35	7°☾39'47		minimum elong	-5290 Aug 31 j 01:56	27°☾33'23	2°06'11
conjunction	-5298 Aug 13 j 22:08	10°☾10'26	1°42'31		-5290 Dec 08 j 21:20	0°♁	

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Attention, astronomical year style is used: The year -5290 in astronomical counting style is the year 5291 BCE in historical counting style.

retrograde	-5290 Dec 11 j 02:07	0°00'05		conjunction	-5282 Sep 17 j 02:27	14°05'54	2°17'56
	-5290 Dec 13 j 07:22	30°00'		minimum elong	-5282 Sep 17 j 02:27	14°05'54	2°18'09
opposition	-5289 Feb 27 j 20:19	28°03'22	2°15'40	max. Earth dist.	-5282 Sep 16 j 14:38	14°05'47	31.32717 AU
min. Earth dist.	-5289 Feb 28 j 13:22	28°03'13	29.34509 AU		-5282 Sep 18 j 21:59	15°00'	
direct	-5289 May 20 j 05:32	27°01'40		retrograde	-5282 Dec 28 j 14:53	17°02'31	
				opposition	-5281 Mar 17 j 23:44	16°00'57	2°27'42
conjunction	-5289 Sep 02 j 11:11	29°04'05	2°08'05	min. Earth dist.	-5281 Mar 18 j 10:48	16°00'13	29.32863 AU
minimum elong	-5289 Sep 02 j 11:11	29°04'05	2°08'21		-5281 Apr 29 j 02:17	15°00'	
max. Earth dist.	-5289 Sep 01 j 17:21	29°04'24	31.34344 AU	direct	-5281 Jun 07 j 03:29	14°03'57	
	-5289 Sep 09 j 12:30	0°00'			-5281 Jul 14 j 22:28	15°00'	
retrograde	-5289 Dec 13 j 13:52	2°01'05					
opposition	-5288 Mar 01 j 08:45	0°04'06	2°17'53	conjunction	-5281 Sep 19 j 11:16	17°05'59	2°18'34
min. Earth dist.	-5288 Mar 02 j 01:29	0°04'58	29.34475 AU	minimum elong	-5281 Sep 19 j 11:16	17°05'59	2°18'47
	-5288 Apr 02 j 17:07	30°00'		max. Earth dist.	-5281 Sep 19 j 01:15	17°05'02	31.32655 AU
direct	-5288 May 21 j 15:11	29°02'45		retrograde	-5281 Dec 31 j 00:48	19°03'25	
	-5288 Jul 07 j 20:34	0°00'		opposition	-5280 Mar 19 j 12:20	18°01'10	2°28'16
				min. Earth dist.	-5280 Mar 19 j 21:58	18°01'03	29.32800 AU
conjunction	-5288 Sep 03 j 20:37	1°05'44	2°10'03	direct	-5280 Jun 08 j 15:01	16°04'14	
minimum elong	-5288 Sep 03 j 20:36	1°05'44	2°10'18				
max. Earth dist.	-5288 Sep 03 j 04:12	1°05'31	31.34229 AU	conjunction	-5280 Sep 20 j 20:06	19°01'13	2°19'00
retrograde	-5288 Dec 14 j 23:43	4°02'13		minimum elong	-5280 Sep 20 j 20:06	19°01'13	2°19'12
opposition	-5287 Mar 03 j 21:02	2°05'44	2°19'53	max. Earth dist.	-5280 Sep 20 j 10:03	19°01'56	31.32589 AU
min. Earth dist.	-5287 Mar 04 j 13:31	2°05'38	29.34288 AU	retrograde	-5279 Jan 01 j 12:57	21°04'38	
direct	-5287 May 24 j 04:17	1°03'53		opposition	-5279 Mar 22 j 00:50	20°02'31	2°28'38
				min. Earth dist.	-5279 Mar 22 j 09:50	20°02'05	29.32727 AU
conjunction	-5287 Sep 06 j 05:45	4°05'16	2°11'50	direct	-5279 Jun 10 j 23:55	18°05'40	
minimum elong	-5287 Sep 06 j 05:45	4°05'16	2°12'07				
max. Earth dist.	-5287 Sep 05 j 12:48	4°03'40	31.33987 AU	conjunction	-5279 Sep 23 j 05:08	21°02'35	2°19'14
retrograde	-5287 Dec 17 j 12:20	6°03'20		minimum elong	-5279 Sep 23 j 05:08	21°02'35	2°19'27
opposition	-5286 Mar 06 j 09:23	5°01'14	2°21'42	max. Earth dist.	-5279 Sep 22 j 20:50	21°02'58	31.32480 AU
min. Earth dist.	-5286 Mar 07 j 00:45	5°00'12	29.34004 AU	retrograde	-5278 Jan 03 j 23:29	23°05'19	
direct	-5286 May 26 j 16:19	3°04'02		opposition	-5278 Mar 24 j 13:37	22°03'20	2°28'46
				min. Earth dist.	-5278 Mar 24 j 22:05	22°03'12	29.32570 AU
conjunction	-5286 Sep 08 j 14:52	6°01'53	2°13'26	direct	-5278 Jun 13 j 12:10	21°08'16	
minimum elong	-5286 Sep 08 j 14:52	6°01'53	2°13'41				
max. Earth dist.	-5286 Sep 07 j 23:41	6°01'42	31.33660 AU	conjunction	-5278 Sep 25 j 13:56	23°03'06	2°19'16
retrograde	-5286 Dec 19 j 22:07	8°04'23		minimum elong	-5278 Sep 25 j 13:56	23°03'06	2°19'27
opposition	-5285 Mar 08 j 21:55	7°02'34	2°23'19	max. Earth dist.	-5278 Sep 25 j 05:21	23°03'17	31.32279 AU
min. Earth dist.	-5285 Mar 09 j 13:20	7°01'32	29.33664 AU	retrograde	-5277 Jan 06 j 12:54	26°00'45	
direct	-5285 May 29 j 04:45	5°05'23		opposition	-5277 Mar 27 j 02:26	24°04'23	2°28'42
				min. Earth dist.	-5277 Mar 27 j 09:38	24°04'10	29.32314 AU
conjunction	-5285 Sep 10 j 23:48	8°02'50	2°14'51	direct	-5277 Jun 15 j 23:00	23°01'57	
minimum elong	-5285 Sep 10 j 23:48	8°02'50	2°15'07				
max. Earth dist.	-5285 Sep 10 j 08:52	8°02'42	31.33330 AU	conjunction	-5277 Sep 27 j 23:02	25°04'44	2°19'06
retrograde	-5285 Dec 22 j 08:47	10°05'25		minimum elong	-5277 Sep 27 j 23:02	25°04'44	2°19'18
opposition	-5284 Mar 10 j 10:17	9°03'04	2°24'43	max. Earth dist.	-5277 Sep 27 j 16:00	25°04'04	31.31951 AU
min. Earth dist.	-5284 Mar 10 j 23:41	9°02'50	29.33356 AU	retrograde	-5276 Jan 08 j 23:45	28°01'54	
direct	-5284 May 30 j 17:05	8°00'34		opposition	-5276 Mar 28 j 15:21	26°05'32	2°28'26
				min. Earth dist.	-5276 Mar 28 j 22:45	26°05'25	29.31919 AU
conjunction	-5284 Sep 12 j 08:42	10°03'54	2°16'04	direct	-5276 Jun 17 j 10:26	25°02'44	
minimum elong	-5284 Sep 12 j 08:42	10°03'54	2°16'18				
max. Earth dist.	-5284 Sep 11 j 19:13	10°03'43	31.33041 AU	conjunction	-5276 Sep 29 j 07:58	27°05'25	2°18'44
retrograde	-5284 Dec 23 j 18:23	13°00'25		minimum elong	-5276 Sep 29 j 07:59	27°05'25	2°18'55
opposition	-5283 Mar 12 j 22:48	11°04'04	2°25'56	max. Earth dist.	-5276 Sep 29 j 00:59	27°05'45	31.31494 AU
min. Earth dist.	-5283 Mar 13 j 12:09	11°03'55	29.33113 AU		-5276 Dec 01 j 05:01	0°00'	
direct	-5283 Jun 02 j 05:12	10°01'40		retrograde	-5275 Jan 10 j 11:29	0°00'26	
					-5275 Feb 21 j 03:58	30°00'	
conjunction	-5283 Sep 14 j 17:35	12°04'53	2°17'06	opposition	-5275 Mar 31 j 04:06	29°00'07	2°27'56
minimum elong	-5283 Sep 14 j 17:35	12°04'53	2°17'20	min. Earth dist.	-5275 Mar 31 j 09:49	29°00'34	29.31385 AU
max. Earth dist.	-5283 Sep 14 j 05:04	12°04'42	31.32843 AU	direct	-5275 Jun 19 j 22:45	27°04'03	
	-5283 Nov 28 j 06:32	15°00'			-5275 Sep 27 j 16:35	0°00'	
retrograde	-5283 Dec 26 j 04:39	15°00'13					
	-5282 Jan 23 j 18:49	15°00'		conjunction	-5275 Oct 01 j 16:56	0°00'09	2°18'11
opposition	-5282 Mar 15 j 11:06	13°05'01	2°26'55	minimum elong	-5275 Oct 01 j 16:56	0°00'09	2°18'22
min. Earth dist.	-5282 Mar 15 j 22:23	13°05'00	29.32949 AU	max. Earth dist.	-5275 Oct 01 j 10:50	0°00'08	31.30889 AU
direct	-5282 Jun 04 j 17:27	12°02'46		retrograde	-5274 Jan 12 j 22:09	2°00'37	
				opposition	-5274 Apr 02 j 16:59	1°00'14	2°27'15

Attention, astronomical year style is used: The year -5274 in astronomical counting style is the year 5275 BCE in historical counting style.

min. Earth dist.	-5274 Apr 02 j 22:59	1° \mathring{M} 14'27	29.30728 AU	direct	-5266 Jul 10 j 02:51	17° \mathring{M} 17'11	
	-5274 May 29 j 22:55	30° $\mathring{R}\Omega$					
direct	-5274 Jun 22 j 11:07	29° Ω 51'16		conjunction	-5266 Oct 21 j 00:38	19° \mathring{M} 45'01	2°04'30
	-5274 Jul 15 j 11:12	0° \mathring{M}		minimum elong	-5266 Oct 21 j 00:38	19° \mathring{M} 45'01	2°04'34
				max. Earth dist.	-5266 Oct 21 j 03:52	19° \mathring{M} 45'19	31.25924 AU
conjunction	-5274 Oct 04 j 01:51	2° \mathring{M} 19'45	2°17'26	retrograde	-5265 Feb 02 j 04:58	22° \mathring{M} 14'39	
minimum elong	-5274 Oct 04 j 01:52	2° \mathring{M} 19'45	2°17'35	opposition	-5265 Apr 23 j 13:11	20° \mathring{M} 51'33	2°11'42
max. Earth dist.	-5274 Oct 03 j 20:44	2° \mathring{M} 19'16	31.30203 AU	min. Earth dist.	-5265 Apr 23 j 09:45	20° \mathring{M} 51'46	29.25804 AU
retrograde	-5273 Jan 15 j 09:02	4° \mathring{M} 48'08		direct	-5265 Jul 12 j 14:30	19° \mathring{M} 28'26	
opposition	-5273 Apr 05 j 05:49	3° \mathring{M} 25'31	2°26'21				
min. Earth dist.	-5273 Apr 05 j 09:51	3° \mathring{M} 25'14	29.30005 AU	conjunction	-5265 Oct 23 j 09:46	21° \mathring{M} 56'12	2°02'02
direct	-5273 Jun 24 j 23:56	2° \mathring{M} 01'57		minimum elong	-5265 Oct 23 j 09:47	21° \mathring{M} 56'12	2°02'06
				max. Earth dist.	-5265 Oct 23 j 14:01	21° \mathring{M} 56'36	31.25374 AU
conjunction	-5273 Oct 06 j 10:32	4° \mathring{M} 30'18	2°16'29	retrograde	-5264 Feb 04 j 16:54	24° \mathring{M} 26'00	
minimum elong	-5273 Oct 06 j 10:33	4° \mathring{M} 30'18	2°16'39	opposition	-5264 Apr 25 j 02:15	23° \mathring{M} 02'50	2°08'59
max. Earth dist.	-5273 Oct 06 j 05:59	4° \mathring{M} 29'52	31.29471 AU	min. Earth dist.	-5264 Apr 24 j 21:07	23° \mathring{M} 03'11	29.25177 AU
retrograde	-5272 Jan 17 j 19:01	6° \mathring{M} 58'49		direct	-5264 Jul 14 j 03:05	21° \mathring{M} 39'46	
opposition	-5272 Apr 06 j 18:44	5° \mathring{M} 36'06	2°25'14				
min. Earth dist.	-5272 Apr 06 j 22:33	5° \mathring{M} 35'50	29.29286 AU	conjunction	-5264 Oct 24 j 19:01	24° \mathring{M} 07'28	1°59'24
direct	-5272 Jun 26 j 10:23	4° \mathring{M} 12'33		minimum elong	-5264 Oct 24 j 19:02	24° \mathring{M} 07'28	1°59'26
				max. Earth dist.	-5264 Oct 24 j 23:13	24° \mathring{M} 07'52	31.24677 AU
conjunction	-5272 Oct 07 j 19:26	6° \mathring{M} 40'47	2°15'21	retrograde	-5263 Feb 06 j 04:01	26° \mathring{M} 37'26	
minimum elong	-5272 Oct 07 j 19:26	6° \mathring{M} 40'48	2°15'29	opposition	-5263 Apr 27 j 15:19	25° \mathring{M} 14'12	2°06'04
max. Earth dist.	-5272 Oct 07 j 16:50	6° \mathring{M} 40'33	31.28775 AU	min. Earth dist.	-5263 Apr 27 j 10:26	25° \mathring{M} 14'31	29.24409 AU
retrograde	-5271 Jan 19 j 04:17	9° \mathring{M} 09'26		direct	-5263 Jul 16 j 13:42	23° \mathring{M} 51'10	
opposition	-5271 Apr 09 j 07:22	7° \mathring{M} 46'37	2°23'55				
min. Earth dist.	-5271 Apr 09 j 09:33	7° \mathring{M} 46'28	29.28614 AU	conjunction	-5263 Oct 27 j 04:24	26° \mathring{M} 18'47	1°56'35
direct	-5271 Jun 28 j 22:14	6° \mathring{M} 23'06		minimum elong	-5263 Oct 27 j 04:25	26° \mathring{M} 18'47	1°56'38
				max. Earth dist.	-5263 Oct 27 j 10:10	26° \mathring{M} 19'19	31.23842 AU
conjunction	-5271 Oct 10 j 04:10	8° \mathring{M} 51'15	2°14'01	retrograde	-5262 Feb 08 j 14:14	28° \mathring{M} 48'53	
minimum elong	-5271 Oct 10 j 04:11	8° \mathring{M} 51'15	2°14'10	opposition	-5262 Apr 30 j 04:28	27° \mathring{M} 25'33	2°02'59
max. Earth dist.	-5271 Oct 10 j 01:44	8° \mathring{M} 51'01	31.28150 AU	min. Earth dist.	-5262 Apr 29 j 22:21	27° \mathring{M} 25'58	29.23490 AU
retrograde	-5270 Jan 21 j 16:29	11° \mathring{M} 20'02		direct	-5262 Jul 19 j 02:25	26° \mathring{M} 02'33	
opposition	-5270 Apr 11 j 20:14	9° \mathring{M} 57'09	2°22'24				
min. Earth dist.	-5270 Apr 11 j 21:18	9° \mathring{M} 57'05	29.28042 AU	conjunction	-5262 Oct 29 j 13:30	28° \mathring{M} 30'04	1°53'36
direct	-5270 Jul 01 j 07:18	8° \mathring{M} 33'41		minimum elong	-5262 Oct 29 j 13:31	28° \mathring{M} 30'04	1°53'38
				max. Earth dist.	-5262 Oct 29 j 19:00	28° \mathring{M} 30'35	31.22876 AU
conjunction	-5270 Oct 12 j 12:58	11° \mathring{M} 01'44	2°12'30		-5262 Dec 10 j 23:42	0° \mathring{M}	
minimum elong	-5270 Oct 12 j 12:58	11° \mathring{M} 01'44	2°12'37	retrograde	-5261 Feb 11 j 02:50	1° \mathring{M} 00'19	
max. Earth dist.	-5270 Oct 12 j 12:46	11° \mathring{M} 01'43	31.27624 AU		-5261 Apr 18 j 06:31	30° $\mathring{R}\mathring{M}$	
retrograde	-5269 Jan 24 j 02:49	13° \mathring{M} 30'41		opposition	-5261 May 02 j 17:40	29° \mathring{M} 36'53	1°59'43
opposition	-5269 Apr 14 j 09:13	12° \mathring{M} 07'45	2°20'40	min. Earth dist.	-5261 May 02 j 10:57	29° \mathring{M} 37'20	29.22476 AU
min. Earth dist.	-5269 Apr 14 j 09:11	12° \mathring{M} 07'45	29.27550 AU	direct	-5261 Jul 21 j 12:25	28° \mathring{M} 13'53	
direct	-5269 Jul 03 j 19:12	10° \mathring{M} 44'21			-5261 Oct 13 j 13:01	0° \mathring{M}	
conjunction	-5269 Oct 14 j 21:45	13° \mathring{M} 12'20	2°10'47	conjunction	-5261 Oct 31 j 22:52	0° \mathring{M} 41'18	1°50'28
minimum elong	-5269 Oct 14 j 21:45	13° \mathring{M} 12'20	2°10'55	minimum elong	-5261 Oct 31 j 22:53	0° \mathring{M} 41'18	1°50'30
max. Earth dist.	-5269 Oct 14 j 21:44	13° \mathring{M} 12'20	31.27186 AU	max. Earth dist.	-5261 Nov 01 j 06:13	0° \mathring{M} 42'00	31.21830 AU
retrograde	-5268 Jan 26 j 16:22	15° \mathring{M} 41'27		retrograde	-5260 Feb 13 j 12:52	3° \mathring{M} 11'41	
opposition	-5268 Apr 15 j 22:01	14° \mathring{M} 18'28	2°18'44	opposition	-5260 May 04 j 06:37	1° \mathring{M} 48'08	1°56'16
min. Earth dist.	-5268 Apr 15 j 20:22	14° \mathring{M} 18'35	29.27140 AU	min. Earth dist.	-5260 May 03 j 23:11	1° \mathring{M} 48'39	29.21405 AU
direct	-5268 Jul 05 j 04:36	12° \mathring{M} 55'08		direct	-5260 Jul 23 j 00:21	0° \mathring{M} 25'08	
conjunction	-5268 Oct 16 j 06:41	15° \mathring{M} 23'04	2°08'53	conjunction	-5260 Nov 02 j 08:03	2° \mathring{M} 52'28	1°47'10
minimum elong	-5268 Oct 16 j 06:41	15° \mathring{M} 23'04	2°08'58	minimum elong	-5260 Nov 02 j 08:03	2° \mathring{M} 52'28	1°47'10
max. Earth dist.	-5268 Oct 16 j 08:30	15° \mathring{M} 23'14	31.26787 AU	max. Earth dist.	-5260 Nov 02 j 15:28	2° \mathring{M} 53'10	31.20773 AU
retrograde	-5267 Jan 28 j 03:27	17° \mathring{M} 52'22		retrograde	-5259 Feb 15 j 02:00	5° \mathring{M} 23'00	
opposition	-5267 Apr 18 j 11:02	16° \mathring{M} 29'20	2°16'35	opposition	-5259 May 06 j 19:35	3° \mathring{M} 59'21	1°52'40
min. Earth dist.	-5267 Apr 18 j 09:16	16° \mathring{M} 29'27	29.26737 AU	min. Earth dist.	-5259 May 06 j 10:35	3° \mathring{M} 59'58	29.20361 AU
direct	-5267 Jul 07 j 14:54	15° \mathring{M} 06'05		direct	-5259 Jul 25 j 09:59	2° \mathring{M} 36'21	
conjunction	-5267 Oct 18 j 15:33	17° \mathring{M} 33'57	2°06'47	conjunction	-5259 Nov 04 j 17:17	5° \mathring{M} 03'37	1°43'43
minimum elong	-5267 Oct 18 j 15:34	17° \mathring{M} 33'58	2°06'52	minimum elong	-5259 Nov 04 j 17:18	5° \mathring{M} 03'38	1°43'43
max. Earth dist.	-5267 Oct 18 j 17:54	17° \mathring{M} 34'11	31.26387 AU	max. Earth dist.	-5259 Nov 05 j 02:29	5° \mathring{M} 04'30	31.19750 AU
retrograde	-5266 Jan 30 j 16:28	20° \mathring{M} 03'25		retrograde	-5258 Feb 17 j 12:58	7° \mathring{M} 34'19	
opposition	-5266 Apr 20 j 23:58	18° \mathring{M} 40'22	2°14'15	opposition	-5258 May 09 j 08:37	6° \mathring{M} 10'35	1°48'54
min. Earth dist.	-5266 Apr 20 j 20:19	18° \mathring{M} 40'37	29.26308 AU	min. Earth dist.	-5258 May 08 j 23:19	6° \mathring{M} 11'12	29.19375 AU

Attention, astronomical year style is used: The year -5258 in astronomical counting style is the year 5259 BCE in historical counting style.

direct	-5258 Jul 27 j 20:09	4° <u>♄</u> 47'36		minimum elong	-5250 Nov 24 j 08:28	24° <u>♄</u> 50'25	1°06'16
				max. Earth dist.	-5250 Nov 25 j 00:37	24° <u>♄</u> 51'56	31.11861 AU
conjunction	-5258 Nov 07 j 02:34	7° <u>♄</u> 14'49	1°40'07	retrograde	-5249 Mar 10 j 03:59	27° <u>♄</u> 22'40	
minimum elong	-5258 Nov 07 j 02:35	7° <u>♄</u> 14'49	1°40'06	opposition	-5249 May 30 j 05:47	25° <u>♄</u> 58'24	1°08'22
max. Earth dist.	-5258 Nov 07 j 12:36	7° <u>♄</u> 15'46	31.18827 AU	min. Earth dist.	-5249 May 29 j 13:54	25° <u>♄</u> 59'29	29.11290 AU
retrograde	-5257 Feb 20 j 02:30	9° <u>♄</u> 45'41		direct	-5249 Aug 16 j 23:47	24° <u>♄</u> 35'45	
opposition	-5257 May 11 j 21:31	8° <u>♄</u> 21'53	1°44'58				
min. Earth dist.	-5257 May 11 j 10:06	8° <u>♄</u> 22'39	29.18492 AU	conjunction	-5249 Nov 26 j 18:34	27° <u>♄</u> 02'46	1°01'39
direct	-5257 Jul 30 j 07:44	6° <u>♄</u> 58'56		minimum elong	-5249 Nov 26 j 18:35	27° <u>♄</u> 02'46	1°01'32
				max. Earth dist.	-5249 Nov 27 j 11:08	27° <u>♄</u> 04'20	31.10607 AU
conjunction	-5257 Nov 09 j 11:54	9° <u>♄</u> 26'08	1°36'22	retrograde	-5248 Mar 11 j 17:28	29° <u>♄</u> 35'08	
minimum elong	-5257 Nov 09 j 11:55	9° <u>♄</u> 26'08	1°36'21	opposition	-5248 May 31 j 18:39	28° <u>♄</u> 10'45	1°03'15
max. Earth dist.	-5257 Nov 09 j 22:55	9° <u>♄</u> 27'11	31.17988 AU	min. Earth dist.	-5248 May 31 j 01:15	28° <u>♄</u> 11'56	29.09999 AU
retrograde	-5256 Feb 22 j 15:44	11° <u>♄</u> 57'11		direct	-5248 Aug 18 j 11:35	26° <u>♄</u> 48'03	
opposition	-5256 May 13 j 10:35	10° <u>♄</u> 33'19	1°40'53				
min. Earth dist.	-5256 May 12 j 23:08	10° <u>♄</u> 34'05	29.17691 AU	conjunction	-5248 Nov 28 j 04:40	29° <u>♄</u> 15'01	0°56'50
direct	-5256 Jul 31 j 18:45	9° <u>♄</u> 10'27		minimum elong	-5248 Nov 28 j 04:40	29° <u>♄</u> 15'01	0°56'41
				max. Earth dist.	-5248 Nov 28 j 21:43	29° <u>♄</u> 16'38	31.09299 AU
conjunction	-5256 Nov 10 j 21:24	11° <u>♄</u> 37'37	1°32'28		-5248 Dec 18 j 06:34	0° <u>♄</u>	
minimum elong	-5256 Nov 10 j 21:25	11° <u>♄</u> 37'37	1°32'25	retrograde	-5247 Mar 14 j 06:11	1° <u>♄</u> 47'30	
max. Earth dist.	-5256 Nov 11 j 09:49	11° <u>♄</u> 38'48	31.17228 AU	opposition	-5247 Jun 03 j 07:30	0° <u>♄</u> 23'00	0°58'04
retrograde	-5255 Feb 24 j 04:11	14° <u>♄</u> 08'51		min. Earth dist.	-5247 Jun 02 j 14:25	0° <u>♄</u> 24'09	29.08700 AU
opposition	-5255 May 15 j 23:21	12° <u>♄</u> 44'57	1°36'38		-5247 Jun 17 j 12:52	30° <u>♄</u>	
min. Earth dist.	-5255 May 15 j 09:58	12° <u>♄</u> 45'51	29.16939 AU	direct	-5247 Aug 20 j 22:11	29° <u>♄</u> 00'16	
direct	-5255 Aug 03 j 06:42	11° <u>♄</u> 22'08			-5247 Oct 20 j 14:16	0° <u>♄</u>	
conjunction	-5255 Nov 13 j 06:53	13° <u>♄</u> 49'19	1°28'26	conjunction	-5247 Nov 30 j 14:53	1° <u>♄</u> 27'11	0°51'56
minimum elong	-5255 Nov 13 j 06:53	13° <u>♄</u> 49'19	1°28'24	minimum elong	-5247 Nov 30 j 14:53	1° <u>♄</u> 27'11	0°51'48
max. Earth dist.	-5255 Nov 13 j 19:29	13° <u>♄</u> 50'30	31.16496 AU	max. Earth dist.	-5247 Dec 01 j 09:19	1° <u>♄</u> 28'55	31.08036 AU
retrograde	-5254 Feb 26 j 16:24	16° <u>♄</u> 20'44		retrograde	-5246 Mar 16 j 18:48	3° <u>♄</u> 59'46	
opposition	-5254 May 18 j 12:30	14° <u>♄</u> 56'48	1°32'15	opposition	-5246 Jun 05 j 20:15	2° <u>♄</u> 35'10	0°52'47
min. Earth dist.	-5254 May 17 j 23:08	14° <u>♄</u> 57'43	29.16210 AU	min. Earth dist.	-5246 Jun 05 j 01:16	2° <u>♄</u> 36'28	29.07469 AU
direct	-5254 Aug 05 j 17:06	13° <u>♄</u> 34'04		direct	-5246 Aug 23 j 10:13	1° <u>♄</u> 12'24	
conjunction	-5254 Nov 15 j 16:33	16° <u>♄</u> 01'13	1°24'16	conjunction	-5246 Dec 03 j 00:57	3° <u>♄</u> 39'17	0°46'57
minimum elong	-5254 Nov 15 j 16:33	16° <u>♄</u> 01'13	1°24'11	minimum elong	-5246 Dec 03 j 00:57	3° <u>♄</u> 39'17	0°46'48
max. Earth dist.	-5254 Nov 16 j 07:00	16° <u>♄</u> 02'36	31.15761 AU	max. Earth dist.	-5246 Dec 03 j 19:30	3° <u>♄</u> 41'03	31.06854 AU
retrograde	-5253 Mar 01 j 03:56	18° <u>♄</u> 32'50		retrograde	-5245 Mar 19 j 07:54	6° <u>♄</u> 12'01	
min. Earth dist.	-5253 May 20 j 10:59	17° <u>♄</u> 09'52	29.15439 AU	opposition	-5245 Jun 08 j 09:07	4° <u>♄</u> 47'19	0°47'25
opposition	-5253 May 21 j 01:34	17° <u>♄</u> 08'52	1°27'43	min. Earth dist.	-5245 Jun 07 j 14:08	4° <u>♄</u> 48'37	29.06349 AU
direct	-5253 Aug 08 j 05:52	15° <u>♄</u> 46'12		direct	-5245 Aug 25 j 21:04	3° <u>♄</u> 24'33	
conjunction	-5253 Nov 18 j 02:20	18° <u>♄</u> 13'20	1°19'58	conjunction	-5245 Dec 05 j 11:24	5° <u>♄</u> 51'26	0°41'54
minimum elong	-5253 Nov 18 j 02:20	18° <u>♄</u> 13'20	1°19'54	minimum elong	-5245 Dec 05 j 11:24	5° <u>♄</u> 51'26	0°41'46
max. Earth dist.	-5253 Nov 18 j 16:21	18° <u>♄</u> 14'40	31.14963 AU	max. Earth dist.	-5245 Dec 06 j 07:52	5° <u>♄</u> 53'22	31.05794 AU
retrograde	-5252 Mar 02 j 17:24	20° <u>♄</u> 45'08		retrograde	-5244 Mar 20 j 20:18	8° <u>♄</u> 24'16	
opposition	-5252 May 22 j 14:33	19° <u>♄</u> 21'08	1°23'03	opposition	-5244 Jun 09 j 21:38	6° <u>♄</u> 59'31	0°41'59
min. Earth dist.	-5252 May 21 j 23:42	19° <u>♄</u> 22'08	29.14598 AU	min. Earth dist.	-5244 Jun 09 j 01:19	7° <u>♄</u> 00'54	29.05340 AU
direct	-5252 Aug 09 j 15:45	17° <u>♄</u> 58'29		direct	-5244 Aug 27 j 09:52	5° <u>♄</u> 36'45	
conjunction	-5252 Nov 19 j 12:24	20° <u>♄</u> 25'37	1°15'32	conjunction	-5244 Dec 06 j 21:43	8° <u>♄</u> 03'39	0°36'48
minimum elong	-5252 Nov 19 j 12:24	20° <u>♄</u> 25'37	1°15'27	minimum elong	-5244 Dec 06 j 21:44	8° <u>♄</u> 03'39	0°36'37
max. Earth dist.	-5252 Nov 20 j 03:51	20° <u>♄</u> 27'05	31.14061 AU	max. Earth dist.	-5244 Dec 07 j 17:55	8° <u>♄</u> 05'33	31.04849 AU
retrograde	-5251 Mar 05 j 03:33	22° <u>♄</u> 57'35		retrograde	-5243 Mar 23 j 09:39	10° <u>♄</u> 36'39	
opposition	-5251 May 25 j 03:37	21° <u>♄</u> 33'31	1°18'16	opposition	-5243 Jun 12 j 10:20	9° <u>♄</u> 11'51	0°36'29
min. Earth dist.	-5251 May 24 j 12:24	21° <u>♄</u> 34'33	29.13621 AU	min. Earth dist.	-5243 Jun 11 j 13:32	9° <u>♄</u> 13'16	29.04450 AU
direct	-5251 Aug 12 j 03:36	20° <u>♄</u> 10'54		direct	-5243 Aug 29 j 19:47	7° <u>♄</u> 49'07	
conjunction	-5251 Nov 21 j 22:18	22° <u>♄</u> 38'00	1°11'01	conjunction	-5243 Dec 09 j 08:09	10° <u>♄</u> 16'01	0°31'37
minimum elong	-5251 Nov 21 j 22:18	22° <u>♄</u> 38'00	1°10'56	minimum elong	-5243 Dec 09 j 08:09	10° <u>♄</u> 16'01	0°31'27
max. Earth dist.	-5251 Nov 22 j 13:23	22° <u>♄</u> 39'26	31.13029 AU	max. Earth dist.	-5243 Dec 10 j 06:08	10° <u>♄</u> 18'06	31.03999 AU
retrograde	-5250 Mar 07 j 16:41	25° <u>♄</u> 10'08		retrograde	-5242 Mar 25 j 20:26	12° <u>♄</u> 49'11	
opposition	-5250 May 27 j 16:43	23° <u>♄</u> 45'58	1°13'22	opposition	-5242 Jun 14 j 23:04	11° <u>♄</u> 24'22	0°30'55
min. Earth dist.	-5250 May 27 j 00:30	23° <u>♄</u> 47'05	29.12518 AU	min. Earth dist.	-5242 Jun 14 j 01:39	11° <u>♄</u> 25'50	29.03631 AU
direct	-5250 Aug 14 j 13:21	22° <u>♄</u> 23'21		direct	-5242 Sep 01 j 07:29	10° <u>♄</u> 01'40	
conjunction	-5250 Nov 24 j 08:27	24° <u>♄</u> 50'25	1°06'23	conjunction	-5242 Dec 11 j 18:47	12° <u>♄</u> 28'37	0°26'23

Attention, astronomical year style is used: The year -5242 in astronomical counting style is the year 5243 BCE in historical counting style.

minimum elong	-5242 Dec 11 j 18:47	12°M28'37	0°26'12	opposition	-5235 Jun 30 j 15:17	26°M57'04	0°-8'-57
max. Earth dist.	-5242 Dec 12 j 16:36	12°M30'41	31.03220 AU	min. Earth dist.	-5235 Jun 29 j 16:02	26°M58'40	28.96955 AU
	-5241 Mar 17 j 11:25	15°M		direct	-5235 Sep 16 j 12:34	25°M34'19	
retrograde	-5241 Mar 28 j 10:12	15°M01'57					
	-5241 Apr 08 j 11:20	15°RM		conjunction	-5235 Dec 27 j 01:05	28°M01'33	0°-11'-1
opposition	-5241 Jun 17 j 11:40	13°M37'06	0°25'18	minimum elong	-5235 Dec 27 j 01:05	28°M01'33	0°11'16
min. Earth dist.	-5241 Jun 16 j 13:20	13°M38'38	29.02867 AU	behind sun begin	-5235 Dec 26 j 20:18	28°M01'07	
direct	-5241 Sep 03 j 17:01	12°M14'26		behind sun end	-5235 Dec 27 j 05:51	28°M01'59	
				max. Earth dist.	-5235 Dec 28 j 00:44	28°M03'46	30.96370 AU
conjunction	-5241 Dec 14 j 05:39	14°M41'27	0°21'07		-5234 Feb 24 j 15:45	0°Z	
minimum elong	-5241 Dec 14 j 05:39	14°M41'27	0°20'56	retrograde	-5234 Apr 13 j 07:17	0°Z35'42	
max. Earth dist.	-5241 Dec 15 j 04:28	14°M43'36	31.02447 AU		-5234 Jun 01 j 06:06	30°RM	
	-5241 Dec 22 j 10:02	15°M		min. Earth dist.	-5234 Jul 02 j 04:26	29°M12'06	28.95859 AU
retrograde	-5240 Mar 29 j 22:00	17°M14'57		opposition	-5234 Jul 03 j 03:47	29°M10'29	0°-14'-41
min. Earth dist.	-5240 Jun 18 j 02:32	15°M51'35	29.02079 AU	direct	-5234 Sep 18 j 23:00	27°M47'42	
opposition	-5240 Jun 19 j 00:22	15°M50'05	0°19'38		-5234 Dec 22 j 22:17	0°Z	
	-5240 Jul 21 j 14:44	15°RM					
direct	-5240 Sep 05 j 03:04	14°M27'27		conjunction	-5234 Dec 29 j 12:41	0°Z14'57	0°-16'-20
	-5240 Oct 19 j 01:00	15°M		minimum elong	-5234 Dec 29 j 12:40	0°Z14'57	0°16'37
				max. Earth dist.	-5234 Dec 30 j 13:46	0°Z17'19	30.95306 AU
conjunction	-5240 Dec 15 j 16:39	16°M54'31	0°15'49	retrograde	-5233 Apr 15 j 18:47	2°Z49'10	
minimum elong	-5240 Dec 15 j 16:39	16°M54'31	0°15'36	opposition	-5233 Jul 05 j 16:01	1°Z23'54	0°-20'-22
behind sun begin	-5240 Dec 15 j 14:57	16°M54'22		min. Earth dist.	-5233 Jul 04 j 16:20	1°Z25'33	28.94849 AU
behind sun end	-5240 Dec 15 j 18:21	16°M54'40		direct	-5233 Sep 21 j 11:27	0°Z01'05	
max. Earth dist.	-5240 Dec 16 j 15:38	16°M56'41	31.01640 AU				
retrograde	-5239 Apr 01 j 11:48	19°M28'10		conjunction	-5232 Jan 01 j 00:16	2°Z28'22	0°-21'-39
opposition	-5239 Jun 21 j 12:56	18°M03'17	0°13'56	minimum elong	-5232 Jan 01 j 00:15	2°Z28'22	0°21'55
min. Earth dist.	-5239 Jun 20 j 14:00	18°M04'52	29.01233 AU	max. Earth dist.	-5232 Jan 02 j 00:59	2°Z30'42	30.94362 AU
direct	-5239 Sep 07 j 14:11	16°M40'40		retrograde	-5232 Apr 17 j 09:05	5°Z02'40	
				min. Earth dist.	-5232 Jul 06 j 03:43	3°Z39'03	28.93974 AU
conjunction	-5239 Dec 18 j 03:47	19°M07'47	0°10'29	opposition	-5232 Jul 07 j 04:16	3°Z37'21	0°-26'-3
minimum elong	-5239 Dec 18 j 03:47	19°M07'47	0°10'17	direct	-5232 Sep 22 j 22:01	2°Z14'30	
behind sun begin	-5239 Dec 17 j 22:39	19°M07'19					
behind sun end	-5239 Dec 18 j 08:55	19°M08'15		conjunction	-5231 Jan 02 j 11:54	4°Z41'50	0°-26'-56
max. Earth dist.	-5239 Dec 19 j 02:41	19°M09'57	31.00741 AU	minimum elong	-5231 Jan 02 j 11:54	4°Z41'50	0°27'13
retrograde	-5238 Apr 04 j 00:57	21°M41'35		max. Earth dist.	-5231 Jan 03 j 13:38	4°Z44'16	30.93535 AU
min. Earth dist.	-5238 Jun 23 j 03:40	20°M18'10	29.00288 AU	retrograde	-5231 Apr 19 j 20:13	7°Z16'14	
opposition	-5238 Jun 24 j 01:45	20°M16'39	0°08'13	opposition	-5231 Jul 09 j 16:31	5°Z50'54	0°-31'-41
direct	-5238 Sep 10 j 00:05	18°M54'02		min. Earth dist.	-5231 Jul 08 j 16:20	5°Z52'34	28.93217 AU
				direct	-5231 Sep 25 j 08:38	4°Z28'02	
conjunction	-5238 Dec 20 j 15:05	21°M21'12	0°05'09				
minimum elong	-5238 Dec 20 j 15:05	21°M21'12	0°04'56	conjunction	-5230 Jan 04 j 23:42	6°Z55'26	0°-32'-11
behind sun begin	-5238 Dec 20 j 08:47	21°M20'38		minimum elong	-5230 Jan 04 j 23:42	6°Z55'26	0°32'27
behind sun end	-5238 Dec 20 j 21:22	21°M21'46		max. Earth dist.	-5230 Jan 06 j 01:45	6°Z57'53	30.92851 AU
max. Earth dist.	-5238 Dec 21 j 14:42	21°M23'25	30.99750 AU	retrograde	-5230 Apr 22 j 09:10	9°Z29'55	
retrograde	-5237 Apr 06 j 14:31	23°M55'06		min. Earth dist.	-5230 Jul 11 j 03:18	8°Z06'20	28.92590 AU
opposition	-5237 Jun 26 j 14:21	22°M30'07	0°02'29	opposition	-5230 Jul 12 j 04:41	8°Z04'34	0°-37'-17
min. Earth dist.	-5237 Jun 25 j 15:09	22°M31'43	28.99235 AU	direct	-5230 Sep 27 j 19:22	6°Z41'42	
direct	-5237 Sep 12 j 12:00	21°M07'28					
desc. node	-5237 Dec 03 j 23:17	22°M51'49		conjunction	-5229 Jan 07 j 11:36	9°Z09'11	0°-37'-24
				minimum elong	-5229 Jan 07 j 11:35	9°Z09'11	0°37'41
conjunction	-5237 Dec 23 j 02:27	23°M34'39	0°00'-17	max. Earth dist.	-5229 Jan 08 j 13:42	9°Z11'38	30.92262 AU
minimum elong	-5237 Dec 23 j 02:25	23°M34'39	0°00'31	retrograde	-5229 Apr 24 j 21:43	11°Z43'46	
behind sun begin	-5237 Dec 22 j 19:59	23°M34'05		opposition	-5229 Jul 14 j 17:00	10°Z18'25	0°-42'-49
behind sun end	-5237 Dec 23 j 08:52	23°M35'14		min. Earth dist.	-5229 Jul 13 j 16:31	10°Z20'07	28.92044 AU
max. Earth dist.	-5237 Dec 24 j 01:19	23°M36'49	30.98651 AU	direct	-5229 Sep 30 j 04:30	8°Z55'33	
retrograde	-5236 Apr 08 j 04:31	26°M08'39					
min. Earth dist.	-5236 Jun 27 j 04:26	24°M45'09	28.98108 AU	conjunction	-5228 Jan 09 j 23:51	11°Z23'07	0°-42'-33
opposition	-5236 Jun 28 j 02:52	24°M43'36	0°-3'-14	minimum elong	-5228 Jan 09 j 23:50	11°Z23'07	0°42'50
direct	-5236 Sep 13 j 23:07	23°M20'55		max. Earth dist.	-5228 Jan 11 j 02:37	11°Z25'38	30.91740 AU
				retrograde	-5228 Apr 26 j 11:26	13°Z57'47	
conjunction	-5236 Dec 24 j 13:53	25°M48'07	0°-5'-41	min. Earth dist.	-5228 Jul 15 j 03:33	12°Z34'13	28.91530 AU
minimum elong	-5236 Dec 24 j 13:53	25°M48'07	0°05'57	opposition	-5228 Jul 16 j 04:58	12°Z32'27	0°-48'-19
behind sun begin	-5236 Dec 24 j 07:43	25°M47'34		direct	-5228 Oct 01 j 15:56	11°Z09'34	
behind sun end	-5236 Dec 24 j 20:03	25°M48'41					
max. Earth dist.	-5236 Dec 25 j 14:09	25°M50'24	30.97505 AU	conjunction	-5227 Jan 11 j 12:05	13°Z37'15	0°-47'-39
retrograde	-5235 Apr 10 j 18:05	28°M22'11		minimum elong	-5227 Jan 11 j 12:05	13°Z37'15	0°47'58

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Attention, astronomical year style is used: The year -5227 in astronomical counting style is the year 5228 BCE in historical counting style.

max. Earth dist.	-5227 Jan 12 j 13:58	13° \mathring{A} 39'41	30.91216 AU	max. Earth dist.	-5219 Jan 30 j 19:49	1° \mathring{B} 35'09	30.85280 AU
retrograde	-5227 Apr 29 j 01:34	16° \mathring{A} 12'01		retrograde	-5219 May 17 j 11:12	4° \mathring{B} 07'45	
opposition	-5227 Jul 18 j 17:15	14° \mathring{A} 46'41	0°-53'-44	opposition	-5219 Aug 05 j 16:38	2° \mathring{B} 42'13	-1°-33'-32
min. Earth dist.	-5227 Jul 17 j 16:52	14° \mathring{A} 48'22	28.91000 AU	min. Earth dist.	-5219 Aug 04 j 17:15	2° \mathring{B} 43'51	28.85109 AU
direct	-5227 Oct 04 j 02:31	13° \mathring{A} 23'48		direct	-5219 Oct 21 j 22:20	1° \mathring{B} 18'53	
conjunction	-5226 Jan 14 j 00:33	15° \mathring{A} 51'34	0°-52'-41	conjunction	-5218 Feb 01 j 07:37	3° \mathring{B} 47'19	-1°-29'-30
minimum elong	-5226 Jan 14 j 00:33	15° \mathring{A} 51'34	0°52'59	minimum elong	-5218 Feb 01 j 07:37	3° \mathring{B} 47'19	1°29'48
max. Earth dist.	-5226 Jan 15 j 03:21	15° \mathring{A} 54'05	30.90649 AU	max. Earth dist.	-5218 Feb 02 j 07:55	3° \mathring{B} 49'36	30.84774 AU
retrograde	-5226 May 01 j 15:23	18° \mathring{A} 26'24		retrograde	-5218 May 20 j 00:17	6° \mathring{B} 22'19	
min. Earth dist.	-5226 Jul 20 j 04:44	17° \mathring{A} 02'47	28.90391 AU	min. Earth dist.	-5218 Aug 07 j 06:00	4° \mathring{B} 58'22	28.84680 AU
opposition	-5226 Jul 21 j 05:25	17° \mathring{A} 01'03	0°-59'-4	opposition	-5218 Aug 08 j 04:24	4° \mathring{B} 56'47	-1°-37'-57
direct	-5226 Oct 06 j 15:26	15° \mathring{A} 38'09		direct	-5218 Oct 24 j 08:42	3° \mathring{B} 33'25	
conjunction	-5225 Jan 16 j 13:11	18° \mathring{A} 06'01	0°-57'-39	conjunction	-5217 Feb 03 j 21:01	6° \mathring{B} 01'59	-1°-33'-34
minimum elong	-5225 Jan 16 j 13:11	18° \mathring{A} 06'00	0°57'57	minimum elong	-5217 Feb 03 j 21:01	6° \mathring{B} 01'59	1°33'52
max. Earth dist.	-5225 Jan 17 j 14:32	18° \mathring{A} 08'24	30.89990 AU	max. Earth dist.	-5217 Feb 04 j 22:15	6° \mathring{B} 04'21	30.84400 AU
retrograde	-5225 May 04 j 05:41	20° \mathring{A} 40'54		retrograde	-5217 May 22 j 13:34	8° \mathring{B} 37'00	
opposition	-5225 Jul 23 j 17:32	19° \mathring{A} 15'32	-1°-4'-19	opposition	-5217 Aug 10 j 15:52	7° \mathring{B} 11'30	-1°-42'-14
min. Earth dist.	-5225 Jul 22 j 17:36	19° \mathring{A} 17'12	28.89689 AU	min. Earth dist.	-5217 Aug 09 j 17:08	7° \mathring{B} 13'06	28.84357 AU
direct	-5225 Oct 09 j 01:57	17° \mathring{A} 52'34		direct	-5217 Oct 26 j 20:59	5° \mathring{B} 48'07	
conjunction	-5224 Jan 19 j 02:05	20° \mathring{A} 20'31	-1°-2'-31	conjunction	-5216 Feb 06 j 10:23	8° \mathring{B} 16'49	-1°-37'-29
minimum elong	-5224 Jan 19 j 02:05	20° \mathring{A} 20'31	1°02'48	minimum elong	-5216 Feb 06 j 10:22	8° \mathring{B} 16'49	1°37'47
max. Earth dist.	-5224 Jan 20 j 04:00	20° \mathring{A} 22'57	30.89224 AU	max. Earth dist.	-5216 Feb 07 j 10:15	8° \mathring{B} 19'03	30.84121 AU
retrograde	-5224 May 05 j 18:43	22° \mathring{A} 55'26		retrograde	-5216 May 24 j 04:05	10° \mathring{B} 51'52	
min. Earth dist.	-5224 Jul 24 j 06:05	21° \mathring{A} 31'40	28.88875 AU	min. Earth dist.	-5216 Aug 11 j 05:30	9° \mathring{B} 27'58	28.84123 AU
opposition	-5224 Jul 25 j 05:37	21° \mathring{A} 30'02	-1°-9'-29	opposition	-5216 Aug 12 j 03:32	9° \mathring{B} 26'25	-1°-46'-21
direct	-5224 Oct 10 j 15:03	20° \mathring{A} 07'01		direct	-5216 Oct 28 j 06:58	8° \mathring{B} 03'00	
conjunction	-5223 Jan 20 j 14:45	22° \mathring{A} 35'01	-1°-7'-17	conjunction	-5215 Feb 07 j 23:52	10° \mathring{B} 31'50	-1°-41'-16
minimum elong	-5223 Jan 20 j 14:44	22° \mathring{A} 35'01	1°07'36	minimum elong	-5215 Feb 07 j 23:52	10° \mathring{B} 31'50	1°41'35
max. Earth dist.	-5223 Jan 21 j 15:33	22° \mathring{A} 37'21	30.88381 AU	max. Earth dist.	-5215 Feb 09 j 00:26	10° \mathring{B} 34'09	30.83893 AU
retrograde	-5223 May 08 j 09:32	25° \mathring{A} 09'57		retrograde	-5215 May 26 j 18:00	13° \mathring{B} 06'54	
opposition	-5223 Jul 27 j 17:36	23° \mathring{A} 44'30	-1°-14'-32	opposition	-5215 Aug 14 j 15:07	11° \mathring{B} 41'30	-1°-50'-18
min. Earth dist.	-5223 Jul 26 j 17:55	23° \mathring{A} 46'09	28.88018 AU	min. Earth dist.	-5215 Aug 13 j 17:36	11° \mathring{B} 43'01	28.83904 AU
direct	-5223 Oct 13 j 02:37	22° \mathring{A} 21'25		direct	-5215 Oct 30 j 20:17	10° \mathring{B} 18'05	
conjunction	-5222 Jan 23 j 03:38	24° \mathring{A} 49'29	-1°-11'-58	conjunction	-5214 Feb 10 j 13:34	12° \mathring{B} 47'03	-1°-44'-53
minimum elong	-5222 Jan 23 j 03:38	24° \mathring{A} 49'29	1°12'16	minimum elong	-5214 Feb 10 j 13:33	12° \mathring{B} 47'03	1°45'12
max. Earth dist.	-5222 Jan 24 j 04:50	24° \mathring{A} 51'51	30.87506 AU	max. Earth dist.	-5214 Feb 11 j 12:35	12° \mathring{B} 49'13	30.83670 AU
retrograde	-5222 May 10 j 20:52	27° \mathring{A} 24'25		retrograde	-5214 May 29 j 09:16	15° \mathring{B} 22'07	
min. Earth dist.	-5222 Jul 29 j 06:45	26° \mathring{A} 00'32	28.87160 AU	min. Earth dist.	-5214 Aug 16 j 05:25	13° \mathring{B} 58'14	28.83669 AU
opposition	-5222 Jul 30 j 05:31	25° \mathring{A} 58'56	-1°-19'-28	opposition	-5214 Aug 17 j 02:39	13° \mathring{B} 56'44	-1°-54'-5
direct	-5222 Oct 15 j 14:01	24° \mathring{A} 35'47		direct	-5214 Nov 02 j 08:15	12° \mathring{B} 33'17	
conjunction	-5221 Jan 25 j 16:35	27° \mathring{A} 03'55	-1°-16'-31	conjunction	-5213 Feb 13 j 03:32	15° \mathring{B} 02'23	-1°-48'-21
minimum elong	-5221 Jan 25 j 16:34	27° \mathring{A} 03'54	1°16'51	minimum elong	-5213 Feb 13 j 03:31	15° \mathring{B} 02'23	1°48'40
max. Earth dist.	-5221 Jan 26 j 17:32	27° \mathring{A} 06'16	30.86677 AU	max. Earth dist.	-5213 Feb 14 j 02:24	15° \mathring{B} 04'32	30.83383 AU
retrograde	-5221 May 13 j 10:04	29° \mathring{A} 38'51		retrograde	-5213 May 31 j 21:33	17° \mathring{B} 37'26	
opposition	-5221 Aug 01 j 17:17	28° \mathring{A} 13'20	-1°-24'-17	opposition	-5213 Aug 19 j 14:17	16° \mathring{B} 12'05	-1°-57'-42
min. Earth dist.	-5221 Jul 31 j 17:48	28° \mathring{A} 14'59	28.86369 AU	min. Earth dist.	-5213 Aug 18 j 18:30	16° \mathring{B} 13'28	28.83344 AU
direct	-5221 Oct 18 j 01:26	26° \mathring{A} 50'06		direct	-5213 Nov 04 j 20:05	14° \mathring{B} 48'34	
conjunction	-5220 Jan 28 j 05:34	29° \mathring{A} 18'20	-1°-20'-58	conjunction	-5212 Feb 15 j 17:31	17° \mathring{B} 17'46	-1°-51'-39
minimum elong	-5220 Jan 28 j 05:34	29° \mathring{A} 18'20	1°21'17	minimum elong	-5212 Feb 15 j 17:31	17° \mathring{B} 17'46	1°51'57
max. Earth dist.	-5220 Jan 29 j 06:14	29° \mathring{A} 20'39	30.85913 AU	max. Earth dist.	-5212 Feb 16 j 15:15	17° \mathring{B} 19'48	30.83014 AU
	-5220 Feb 15 j 21:29	0° \mathring{B}		retrograde	-5212 Jun 02 j 11:57	19° \mathring{B} 52'46	
retrograde	-5220 May 14 j 22:11	1° \mathring{B} 53'17		min. Earth dist.	-5212 Aug 20 j 05:50	18° \mathring{B} 28'49	28.82932 AU
min. Earth dist.	-5220 Aug 02 j 06:38	0° \mathring{B} 29'19	28.85674 AU	opposition	-5212 Aug 21 j 01:41	18° \mathring{B} 27'25	-2°-1'-8
opposition	-5220 Aug 03 j 05:00	0° \mathring{B} 27'45	-1°-28'-59	direct	-5212 Nov 06 j 08:18	17° \mathring{B} 03'49	
	-5220 Aug 19 j 23:43	30° \mathring{R} \mathring{A}					
direct	-5220 Oct 19 j 10:45	29° \mathring{A} 04'28		conjunction	-5211 Feb 17 j 07:29	19° \mathring{B} 33'07	-1°-54'-47
	-5220 Dec 16 j 12:59	0° \mathring{B}		minimum elong	-5211 Feb 17 j 07:29	19° \mathring{B} 33'07	1°55'05
				max. Earth dist.	-5211 Feb 18 j 04:20	19° \mathring{B} 35'04	30.82554 AU
conjunction	-5219 Jan 29 j 18:40	1° \mathring{B} 32'47	-1°-25'-18	retrograde	-5211 Jun 05 j 00:30	22° \mathring{B} 08'03	
minimum elong	-5219 Jan 29 j 18:40	1° \mathring{B} 32'47	1°25'37	opposition	-5211 Aug 23 j 13:11	20° \mathring{B} 42'41	-2°-4'-23

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 13

Attention, astronomical year style is used: The year -5211 in astronomical counting style is the year 5212 BCE in historical counting style.

min. Earth dist.	-5211 Aug 22 j 19:02	20° $\overline{3}$ 43'58	28.82454 AU	min. Earth dist.	-5203 Sep 09 j 14:53	8° \approx 43'10	28.81385 AU
direct	-5211 Nov 08 j 18:38	19° $\overline{3}$ 19'00		direct	-5203 Nov 26 j 17:03	7° \approx 17'56	
conjunction	-5210 Feb 19 j 21:28	21° $\overline{3}$ 48'21	-1°-57'-44	conjunction	-5202 Mar 10 j 15:03	9° \approx 48'13	-2°-14'-33
minimum elong	-5210 Feb 19 j 21:27	21° $\overline{3}$ 48'21	1°58'02	minimum elong	-5202 Mar 10 j 15:03	9° \approx 48'13	2°14'49
max. Earth dist.	-5210 Feb 20 j 18:03	21° $\overline{3}$ 50'17	30.82065 AU	max. Earth dist.	-5202 Mar 11 j 06:43	9° \approx 49'41	30.81362 AU
retrograde	-5210 Jun 07 j 12:37	24° $\overline{3}$ 23'12		retrograde	-5202 Jun 25 j 21:18	12° \approx 22'29	
min. Earth dist.	-5210 Aug 25 j 05:56	22° $\overline{3}$ 59'08	28.81959 AU	opposition	-5202 Sep 12 j 16:50	10° \approx 57'24	-2°-24'-35
opposition	-5210 Aug 26 j 00:26	22° $\overline{3}$ 57'49	-2°-7'-27	min. Earth dist.	-5202 Sep 12 j 03:51	10° \approx 58'19	28.81691 AU
direct	-5210 Nov 11 j 07:15	21° $\overline{3}$ 34'02		direct	-5202 Nov 29 j 03:33	9° \approx 33'12	
conjunction	-5209 Feb 22 j 11:31	24° $\overline{3}$ 03'28	-2°00'-30	conjunction	-5201 Mar 13 j 05:47	12° \approx 03'37	-2°-15'-45
minimum elong	-5209 Feb 22 j 11:31	24° $\overline{3}$ 03'28	2°00'48	minimum elong	-5201 Mar 13 j 05:47	12° \approx 03'37	2°16'00
max. Earth dist.	-5209 Feb 23 j 06:40	24° $\overline{3}$ 05'16	30.81574 AU	max. Earth dist.	-5201 Mar 13 j 20:36	12° \approx 05'01	30.81655 AU
retrograde	-5209 Jun 10 j 00:22	26° $\overline{3}$ 38'13		retrograde	-5201 Jun 28 j 10:11	14° \approx 37'49	
opposition	-5209 Aug 28 j 11:38	25° $\overline{3}$ 12'49	-2°-10'-19	opposition	-5201 Sep 15 j 03:39	13° \approx 12'49	-2°-25'-45
min. Earth dist.	-5209 Aug 27 j 18:34	25° $\overline{3}$ 14'01	28.81506 AU	min. Earth dist.	-5201 Sep 14 j 14:43	13° \approx 13'44	28.81953 AU
direct	-5209 Nov 13 j 17:36	23° $\overline{3}$ 48'55		direct	-5201 Dec 01 j 16:09	11° \approx 48'36	
conjunction	-5208 Feb 25 j 01:41	26° $\overline{3}$ 18'27	-2°-3'-6	conjunction	-5200 Mar 14 j 20:28	14° \approx 19'09	-2°-16'-45
minimum elong	-5208 Feb 25 j 01:41	26° $\overline{3}$ 18'26	2°03'23	minimum elong	-5200 Mar 14 j 20:28	14° \approx 19'09	2°16'59
max. Earth dist.	-5208 Feb 25 j 21:20	26° $\overline{3}$ 20'17	30.81155 AU	max. Earth dist.	-5200 Mar 15 j 09:25	14° \approx 20'21	30.81876 AU
retrograde	-5208 Jun 11 j 12:37	28° $\overline{3}$ 53'06			-5200 Apr 02 j 06:22	15° \approx	
opposition	-5208 Aug 29 j 22:43	27° $\overline{3}$ 27'41	-2°-12'-59	retrograde	-5200 Jun 29 j 22:29	16° \approx 53'15	
min. Earth dist.	-5208 Aug 29 j 05:30	27° $\overline{3}$ 28'54	28.81138 AU	opposition	-5200 Sep 16 j 14:46	15° \approx 28'18	-2°-26'-42
direct	-5208 Nov 15 j 05:44	26° $\overline{3}$ 03'42		min. Earth dist.	-5200 Sep 16 j 03:38	15° \approx 29'06	28.82144 AU
conjunction	-5207 Feb 26 j 15:32	28° $\overline{3}$ 33'19	-2°-5'-30		-5200 Oct 03 j 12:10	15° \approx	
minimum elong	-5207 Feb 26 j 15:32	28° $\overline{3}$ 33'19	2°05'47	direct	-5200 Dec 03 j 02:19	14° \approx 04'02	
max. Earth dist.	-5207 Feb 27 j 09:43	28° $\overline{3}$ 35'01	30.80846 AU		-5199 Jan 30 j 23:11	15° \approx	
retrograde	-5207 Apr 08 j 12:43	0° \approx		conjunction	-5199 Mar 17 j 11:08	16° \approx 34'42	-2°-17'-32
	-5207 Jun 14 j 01:51	1° \approx 07'54		minimum elong	-5199 Mar 17 j 11:08	16° \approx 34'42	2°17'45
	-5207 Aug 22 j 01:10	30° \overline{R} $\overline{3}$		max. Earth dist.	-5199 Mar 17 j 23:52	16° \approx 35'53	30.82027 AU
opposition	-5207 Sep 01 j 09:53	29° $\overline{3}$ 42'29	-2°-15'-27	retrograde	-5199 Jul 02 j 10:48	19° \approx 08'42	
min. Earth dist.	-5207 Aug 31 j 17:24	29° $\overline{3}$ 43'39	28.80911 AU	opposition	-5199 Sep 19 j 01:41	17° \approx 43'47	-2°-27'-25
direct	-5207 Nov 17 j 16:12	28° $\overline{3}$ 18'25		min. Earth dist.	-5199 Sep 18 j 14:57	17° \approx 44'33	28.82249 AU
	-5206 Feb 07 j 11:06	0° \approx		direct	-5199 Dec 05 j 14:16	16° \approx 19'27	
conjunction	-5206 Mar 01 j 05:46	0° \approx 48'08	-2°-7'-42	conjunction	-5198 Mar 20 j 01:49	18° \approx 50'12	-2°-18'-6
minimum elong	-5206 Mar 01 j 05:46	0° \approx 48'08	2°07'59	minimum elong	-5198 Mar 20 j 01:49	18° \approx 50'12	2°18'20
max. Earth dist.	-5206 Mar 02 j 00:35	0° \approx 49'54	30.80683 AU	max. Earth dist.	-5198 Mar 20 j 12:22	18° \approx 51'11	30.82108 AU
retrograde	-5206 Jun 16 j 14:26	3° \approx 22'38		retrograde	-5198 Jul 04 j 22:56	21° \approx 24'04	
opposition	-5206 Sep 03 j 20:51	1° \approx 57'15	-2°-17'-42	opposition	-5198 Sep 21 j 12:29	19° \approx 59'12	-2°-27'-55
min. Earth dist.	-5206 Sep 03 j 04:49	1° \approx 58'24	28.80827 AU	min. Earth dist.	-5198 Sep 21 j 03:07	19° \approx 59'52	28.82317 AU
direct	-5206 Nov 20 j 05:18	0° \approx 33'08		direct	-5198 Dec 08 j 01:04	18° \approx 34'46	
conjunction	-5205 Mar 03 j 19:58	3° \approx 02'59	-2°-9'-43	conjunction	-5197 Mar 22 j 16:41	21° \approx 05'36	-2°-18'-28
minimum elong	-5205 Mar 03 j 19:58	3° \approx 02'59	2°09'59	minimum elong	-5197 Mar 22 j 16:42	21° \approx 05'36	2°18'41
max. Earth dist.	-5205 Mar 04 j 13:14	3° \approx 04'36	30.80681 AU	max. Earth dist.	-5197 Mar 23 j 03:19	21° \approx 06'36	30.82164 AU
retrograde	-5205 Jun 19 j 04:53	5° \approx 37'25		retrograde	-5197 Jul 07 j 10:18	23° \approx 39'19	
opposition	-5205 Sep 06 j 07:53	4° \approx 12'05	-2°-19'-45	opposition	-5197 Sep 23 j 23:17	22° \approx 14'28	-2°-28'-12
min. Earth dist.	-5205 Sep 05 j 15:54	4° \approx 13'13	28.80903 AU	min. Earth dist.	-5197 Sep 23 j 14:49	22° \approx 15'04	28.82373 AU
direct	-5205 Nov 22 j 17:10	2° \approx 47'55		direct	-5197 Dec 10 j 14:33	20° \approx 49'57	
conjunction	-5204 Mar 05 j 10:15	5° \approx 17'54	-2°-11'-32	conjunction	-5196 Mar 24 j 07:12	23° \approx 20'52	-2°-18'-38
minimum elong	-5204 Mar 05 j 10:15	5° \approx 17'54	2°11'48	minimum elong	-5196 Mar 24 j 07:12	23° \approx 20'52	2°18'51
max. Earth dist.	-5204 Mar 06 j 03:44	5° \approx 19'32	30.80811 AU	max. Earth dist.	-5196 Mar 24 j 15:50	23° \approx 21'40	30.82245 AU
retrograde	-5204 Jun 20 j 17:20	7° \approx 52'17		retrograde	-5196 Jul 08 j 23:39	25° \approx 54'26	
opposition	-5204 Sep 07 j 18:52	6° \approx 27'01	-2°-21'-35	opposition	-5196 Sep 25 j 09:55	24° \approx 29'36	-2°-28'-15
min. Earth dist.	-5204 Sep 07 j 04:07	6° \approx 28'04	28.81096 AU	min. Earth dist.	-5196 Sep 25 j 01:48	24° \approx 30'10	28.82490 AU
direct	-5204 Nov 24 j 04:50	5° \approx 02'51		direct	-5196 Dec 12 j 02:34	23° \approx 04'59	
conjunction	-5203 Mar 08 j 00:36	7° \approx 32'58	-2°-13'-9	conjunction	-5195 Mar 26 j 21:51	25° \approx 35'59	-2°-18'-34
minimum elong	-5203 Mar 08 j 00:36	7° \approx 32'58	2°13'25	minimum elong	-5195 Mar 26 j 21:52	25° \approx 35'59	2°18'46
max. Earth dist.	-5203 Mar 08 j 17:00	7° \approx 34'30	30.81065 AU	max. Earth dist.	-5195 Mar 27 j 06:34	25° \approx 36'48	30.82399 AU
retrograde	-5203 Jun 23 j 08:28	10° \approx 07'18		retrograde	-5195 Jul 11 j 11:22	28° \approx 09'24	
opposition	-5203 Sep 10 j 05:45	8° \approx 42'07	-2°-23'-11	opposition	-5195 Sep 27 j 20:35	26° \approx 44'35	-2°-28'-5

Attention, astronomical year style is used: The year -5195 in astronomical counting style is the year 5196 BCE in historical counting style.

min. Earth dist.	-5195 Sep 27 j 13:48	26° 44 5'04	28.82701 AU	retrograde	-5187 Jul 29 j 15:10	16° 40 08'10	
direct	-5195 Dec 14 j 14:43	25° 44 19'55		opposition	-5187 Oct 15 j 09:13	14° 40 44'00	-2°-18'-36
				min. Earth dist.	-5187 Oct 15 j 08:51	14° 40 44'01	28.87788 AU
conjunction	-5194 Mar 29 j 12:24	27° 44 50'59	-2°-18'-18	direct	-5186 Jan 01 j 14:12	13° 40 19'05	
minimum elong	-5194 Mar 29 j 12:24	27° 44 50'59	2°18'30				
max. Earth dist.	-5194 Mar 29 j 19:46	27° 44 51'40	30.82684 AU	conjunction	-5186 Apr 17 j 10:15	15° 40 50'55	-2°-8'-38
	-5194 Jun 05 j 15:57	0° 40		minimum elong	-5186 Apr 17 j 10:16	15° 40 50'55	2°08'45
retrograde	-5194 Jul 14 j 01:51	0° 40 24'14		max. Earth dist.	-5186 Apr 17 j 09:45	15° 40 50'52	30.87896 AU
	-5194 Aug 21 j 19:41	30° 40		retrograde	-5186 Aug 01 j 02:05	18° 40 23'01	
opposition	-5194 Sep 30 j 07:07	28° 40 59'28	-2°-27'-41	opposition	-5186 Oct 17 j 19:53	16° 40 58'54	-2°-16'-26
min. Earth dist.	-5194 Sep 30 j 00:08	28° 40 59'58	28.83050 AU	min. Earth dist.	-5186 Oct 17 j 21:19	16° 40 58'48	28.88291 AU
direct	-5194 Dec 17 j 04:20	27° 40 34'44		direct	-5185 Jan 04 j 02:50	15° 40 33'56	
	-5193 Mar 29 j 11:47	0° 40					
conjunction	-5193 Apr 01 j 03:03	0° 40 05'54	-2°-17'-50	conjunction	-5185 Apr 20 j 00:57	18° 40 05'49	-2°-6'-31
minimum elong	-5193 Apr 01 j 03:04	0° 40 05'54	2°18'00	minimum elong	-5185 Apr 20 j 00:58	18° 40 05'49	2°06'37
max. Earth dist.	-5193 Apr 01 j 09:56	0° 40 06'32	30.83096 AU	max. Earth dist.	-5185 Apr 19 j 22:25	18° 40 05'35	30.88378 AU
retrograde	-5193 Jul 16 j 13:26	2° 40 39'00		retrograde	-5185 Aug 03 j 15:32	20° 40 37'45	
opposition	-5193 Oct 02 j 17:44	1° 40 14'17	-2°-27'-3	opposition	-5185 Oct 20 j 06:16	19° 40 13'40	-2°-14'-5
min. Earth dist.	-5193 Oct 02 j 12:22	1° 40 14'40	28.83540 AU	min. Earth dist.	-5185 Oct 20 j 07:56	19° 40 13'33	28.88741 AU
	-5193 Nov 24 j 15:51	30° 40		direct	-5184 Jan 06 j 16:52	17° 40 48'38	
direct	-5193 Dec 19 j 16:01	29° 40 49'31		conjunction	-5184 Apr 21 j 15:37	20° 40 20'34	-2°-4'-13
	-5192 Jan 13 j 11:03	0° 40		minimum elong	-5184 Apr 21 j 15:38	20° 40 20'34	2°04'19
conjunction	-5192 Apr 02 j 17:42	2° 40 20'46	-2°-17'-8	max. Earth dist.	-5184 Apr 21 j 12:26	20° 40 20'16	30.88816 AU
minimum elong	-5192 Apr 02 j 17:42	2° 40 20'46	2°17'19	retrograde	-5184 Aug 05 j 02:30	22° 40 52'19	
max. Earth dist.	-5192 Apr 02 j 23:56	2° 40 21'21	30.83671 AU	opposition	-5184 Oct 21 j 16:49	21° 40 28'16	-2°-11'-31
retrograde	-5192 Jul 18 j 02:40	4° 40 53'44		min. Earth dist.	-5184 Oct 21 j 20:23	21° 40 28'01	28.89183 AU
opposition	-5192 Oct 04 j 04:16	3° 40 29'06	-2°-26'-12	direct	-5183 Jan 08 j 05:10	20° 40 03'10	
min. Earth dist.	-5192 Oct 03 j 22:32	3° 40 29'31	28.84175 AU	conjunction	-5183 Apr 24 j 06:00	22° 40 35'08	-2°-1'-44
direct	-5192 Dec 21 j 04:50	2° 40 04'19		minimum elong	-5183 Apr 24 j 06:01	22° 40 35'09	2°01'48
conjunction	-5191 Apr 05 j 08:09	4° 40 35'40	-2°-16'-14	max. Earth dist.	-5183 Apr 24 j 01:50	22° 40 34'45	30.89284 AU
minimum elong	-5191 Apr 05 j 08:10	4° 40 35'40	2°16'24	retrograde	-5183 Aug 07 j 15:22	25° 40 06'41	
max. Earth dist.	-5191 Apr 05 j 13:06	4° 40 36'08	30.84367 AU	opposition	-5183 Oct 24 j 03:09	23° 40 42'41	-2°-8'-46
retrograde	-5191 Jul 20 j 15:21	7° 40 08'30		min. Earth dist.	-5183 Oct 24 j 06:34	23° 40 42'27	28.89663 AU
opposition	-5191 Oct 06 j 14:55	5° 40 43'58	-2°-25'-7	direct	-5182 Jan 10 j 18:48	22° 40 17'31	
min. Earth dist.	-5191 Oct 06 j 10:47	5° 40 44'16	28.84923 AU	conjunction	-5182 Apr 26 j 20:27	24° 40 49'33	-1°-59'-4
direct	-5191 Dec 23 j 15:14	4° 40 19'10		minimum elong	-5182 Apr 26 j 20:27	24° 40 49'33	1°59'08
conjunction	-5190 Apr 07 j 22:59	6° 40 50'38	-2°-15'-8	max. Earth dist.	-5182 Apr 26 j 15:01	24° 40 49'03	30.89802 AU
minimum elong	-5190 Apr 07 j 23:00	6° 40 50'38	2°15'17	retrograde	-5182 Aug 10 j 03:37	27° 40 20'55	
max. Earth dist.	-5190 Apr 08 j 03:44	6° 40 51'05	30.85154 AU	opposition	-5182 Oct 26 j 13:30	25° 40 56'58	-2°-5'-49
retrograde	-5190 Jul 23 j 03:26	9° 40 23'20		min. Earth dist.	-5182 Oct 26 j 18:27	25° 40 56'37	28.90233 AU
opposition	-5190 Oct 09 j 01:21	7° 40 58'55	-2°-23'-49	direct	-5181 Jan 13 j 06:08	24° 40 31'45	
min. Earth dist.	-5190 Oct 08 j 21:39	7° 40 59'11	28.85711 AU	conjunction	-5181 Apr 29 j 10:52	27° 40 03'49	-1°-56'-14
direct	-5190 Dec 26 j 03:15	6° 40 34'06		minimum elong	-5181 Apr 29 j 10:53	27° 40 03'49	1°56'16
conjunction	-5189 Apr 10 j 13:47	9° 40 05'41	-2°-13'-48	max. Earth dist.	-5181 Apr 29 j 05:18	27° 40 03'18	30.90435 AU
minimum elong	-5189 Apr 10 j 13:47	9° 40 05'41	2°13'56	retrograde	-5181 Aug 12 j 14:49	29° 40 35'00	
max. Earth dist.	-5189 Apr 10 j 16:22	9° 40 05'55	30.85945 AU	opposition	-5181 Oct 28 j 23:52	28° 40 11'07	-2°-2'-41
retrograde	-5189 Jul 25 j 15:13	11° 40 38'16		min. Earth dist.	-5181 Oct 29 j 04:52	28° 40 10'46	28.90915 AU
opposition	-5189 Oct 11 j 12:02	10° 40 13'56	-2°-22'-18	direct	-5180 Jan 15 j 18:52	26° 40 45'52	
min. Earth dist.	-5189 Oct 11 j 09:45	10° 40 14'06	28.86490 AU	conjunction	-5180 May 01 j 00:55	29° 40 18'00	-1°-53'-12
direct	-5189 Dec 28 j 14:03	8° 40 49'07		minimum elong	-5180 May 01 j 00:55	29° 40 18'00	1°53'16
conjunction	-5188 Apr 12 j 04:36	11° 40 20'47	-2°-12'-17	max. Earth dist.	-5180 Apr 30 j 17:45	29° 40 17'20	30.91192 AU
minimum elong	-5188 Apr 12 j 04:37	11° 40 20'47	2°12'25	-5180 May 20 j 02:15	0° 40		
max. Earth dist.	-5188 Apr 12 j 07:04	11° 40 21'01	30.86686 AU	retrograde	-5180 Aug 14 j 01:39	1° 40 49'01	
retrograde	-5188 Jul 27 j 02:04	13° 40 53'13		opposition	-5180 Oct 30 j 10:17	0° 40 25'13	-1°-59'-22
opposition	-5188 Oct 12 j 22:42	12° 40 28'59	-2°-20'-33	min. Earth dist.	-5180 Oct 30 j 16:07	0° 40 24'48	28.91747 AU
min. Earth dist.	-5188 Oct 12 j 21:35	12° 40 29'04	28.87181 AU	direct	-5180 Nov 14 j 10:08	30° 40	
direct	-5188 Dec 30 j 02:40	11° 40 04'08		-5179 Jan 17 j 05:47	28° 40 59'57		
				-5179 Mar 20 j 08:03	0° 40		
conjunction	-5187 Apr 14 j 19:21	13° 40 35'53	-2°-10'-33	conjunction	-5179 May 03 j 15:11	1° 40 32'08	-1°-50'-1
minimum elong	-5187 Apr 14 j 19:22	13° 40 35'53	2°10'40	minimum elong	-5179 May 03 j 15:11	1° 40 32'08	1°50'03
max. Earth dist.	-5187 Apr 14 j 19:17	13° 40 35'53	30.87341 AU	max. Earth dist.	-5179 May 03 j 08:26	1° 40 31'31	30.92096 AU

Attention, astronomical year style is used: The year -5179 in astronomical counting style is the year 5180 BCE in historical counting style.

retrograde	-5179 Aug 16 j 11:42	4°♊03'00		direct	-5170 Feb 06 j 21:50	19°♊05'10	
opposition	-5179 Nov 01 j 20:31	2°♊39'19	-1°-55'-52				
min. Earth dist.	-5179 Nov 02 j 03:09	2°♊38'50	28.92695 AU	conjunction	-5170 May 24 j 21:01	21°♊37'35	-1°-14'-34
direct	-5178 Jan 19 j 17:31	1°♊14'03		minimum elong	-5170 May 24 j 21:02	21°♊37'36	1°14'30
				max. Earth dist.	-5170 May 24 j 05:11	21°♊36'07	30.99936 AU
conjunction	-5178 May 06 j 05:19	3°♊46'18	-1°-46'-39	retrograde	-5170 Sep 05 j 16:35	24°♊06'52	
minimum elong	-5178 May 06 j 05:19	3°♊46'18	1°46'42	opposition	-5170 Nov 21 j 18:02	22°♊43'44	-1°-17'-19
max. Earth dist.	-5178 May 05 j 20:34	3°♊45'29	30.93105 AU	min. Earth dist.	-5170 Nov 22 j 08:46	22°♊42'42	29.00371 AU
retrograde	-5178 Aug 19 j 00:10	6°♊17'02		direct	-5169 Feb 09 j 10:31	21°♊18'12	
opposition	-5178 Nov 04 j 06:50	4°♊53'26	-1°-52'-11				
min. Earth dist.	-5178 Nov 04 j 13:50	4°♊52'57	28.93733 AU	conjunction	-5169 May 27 j 10:17	23°♊50'36	-1°-10'-1
direct	-5177 Jan 22 j 03:59	3°♊28'11		minimum elong	-5169 May 27 j 10:17	23°♊50'36	1°09'55
				max. Earth dist.	-5169 May 26 j 16:46	23°♊48'59	31.00716 AU
conjunction	-5177 May 08 j 19:34	6°♊00'31	-1°-43'-8	retrograde	-5169 Sep 08 j 03:41	26°♊19'42	
minimum elong	-5177 May 08 j 19:35	6°♊00'31	1°43'08	opposition	-5169 Nov 24 j 04:19	24°♊56'37	-1°-12'-24
max. Earth dist.	-5177 May 08 j 10:53	5°♊59'42	30.94156 AU	min. Earth dist.	-5169 Nov 24 j 18:58	24°♊55'35	29.01208 AU
retrograde	-5177 Aug 21 j 09:49	8°♊31'06		direct	-5168 Feb 11 j 21:31	23°♊31'03	
opposition	-5177 Nov 06 j 17:16	7°♊07'37	-1°-48'-20				
min. Earth dist.	-5177 Nov 07 j 01:54	7°♊07'00	28.94777 AU	conjunction	-5168 May 28 j 23:37	26°♊03'26	-1°-5'-22
direct	-5176 Jan 24 j 16:14	5°♊42'22		minimum elong	-5168 May 28 j 23:38	26°♊03'26	1°05'17
				max. Earth dist.	-5168 May 28 j 06:42	26°♊01'52	31.01614 AU
conjunction	-5176 May 10 j 09:40	8°♊14'46	-1°-39'-27	retrograde	-5168 Sep 09 j 12:14	28°♊32'22	
minimum elong	-5176 May 10 j 09:41	8°♊14'46	1°39'28	opposition	-5168 Nov 25 j 14:42	27°♊09'21	-1°-7'-22
max. Earth dist.	-5176 May 09 j 23:01	8°♊13'46	30.95198 AU	min. Earth dist.	-5168 Nov 26 j 06:28	27°♊08'14	29.02170 AU
retrograde	-5176 Aug 22 j 22:28	10°♊45'12		direct	-5167 Feb 13 j 09:31	25°♊43'46	
opposition	-5176 Nov 08 j 03:38	9°♊21'48	-1°-44'-19				
min. Earth dist.	-5176 Nov 08 j 12:23	9°♊21'11	28.95787 AU	conjunction	-5167 May 31 j 12:40	28°♊16'10	-1°00'-37
direct	-5175 Jan 26 j 05:41	7°♊56'33		minimum elong	-5167 May 31 j 12:41	28°♊16'10	1°00'30
				max. Earth dist.	-5167 May 30 j 18:22	28°♊14'28	31.02659 AU
conjunction	-5175 May 12 j 23:47	10°♊28'59	-1°-35'-38		-5167 Jul 21 j 18:36	0°♊	
minimum elong	-5175 May 12 j 23:48	10°♊28'59	1°35'36	retrograde	-5167 Sep 11 j 23:46	0°♊44'57	
max. Earth dist.	-5175 May 12 j 12:33	10°♊27'56	30.96165 AU		-5167 Nov 04 j 16:45	30°♊	
retrograde	-5175 Aug 25 j 09:02	12°♊59'16		opposition	-5167 Nov 28 j 00:58	29°♊22'01	-1°-2'-14
opposition	-5175 Nov 10 j 14:12	11°♊35'56	-1°-40'-9	min. Earth dist.	-5167 Nov 28 j 16:14	29°♊20'56	29.03270 AU
min. Earth dist.	-5175 Nov 11 j 01:01	11°♊35'10	28.96705 AU	direct	-5166 Feb 15 j 21:51	27°♊56'27	
direct	-5174 Jan 28 j 17:39	10°♊10'39			-5166 May 21 j 01:07	0°♊	
				max. Earth dist.	-5166 Jun 02 j 07:44	0°♊27'12	31.03816 AU
conjunction	-5174 May 15 j 13:55	12°♊43'07	-1°-31'-40				
minimum elong	-5174 May 15 j 13:56	12°♊43'07	1°31'39	conjunction	-5166 Jun 03 j 01:53	0°♊28'53	0°-55'-46
max. Earth dist.	-5174 May 15 j 01:15	12°♊41'56	30.97044 AU	minimum elong	-5166 Jun 03 j 01:53	0°♊28'53	0°55'40
retrograde	-5174 Aug 27 j 21:39	15°♊13'12		retrograde	-5166 Sep 14 j 09:40	2°♊57'33	
opposition	-5174 Nov 13 j 00:31	13°♊49'56	-1°-35'-51	opposition	-5166 Nov 30 j 11:22	1°♊34'42	0°-57'-1
min. Earth dist.	-5174 Nov 13 j 11:26	13°♊49'10	28.97520 AU	min. Earth dist.	-5166 Dec 01 j 04:11	1°♊33'32	29.04473 AU
direct	-5173 Jan 31 j 07:49	12°♊24'37		direct	-5165 Feb 18 j 08:46	0°♊09'11	
conjunction	-5173 May 18 j 03:57	14°♊57'05	-1°-27'-34	conjunction	-5165 Jun 05 j 14:56	2°♊41'39	0°-50'-51
minimum elong	-5173 May 18 j 03:58	14°♊57'05	1°27'32	minimum elong	-5165 Jun 05 j 14:56	2°♊41'39	0°50'43
max. Earth dist.	-5173 May 17 j 13:55	14°♊55'47	30.97817 AU	max. Earth dist.	-5165 Jun 04 j 20:02	2°♊39'53	31.05066 AU
retrograde	-5173 Aug 30 j 09:35	17°♊26'59		retrograde	-5165 Sep 16 j 21:51	5°♊10'12	
opposition	-5173 Nov 15 j 11:04	16°♊03'45	-1°-31'-24	opposition	-5165 Dec 02 j 21:47	3°♊47'28	0°-51'-43
min. Earth dist.	-5173 Nov 15 j 23:41	16°♊02'52	28.98259 AU	min. Earth dist.	-5165 Dec 03 j 14:12	3°♊46'19	29.05730 AU
direct	-5172 Feb 02 j 20:23	14°♊38'23		direct	-5164 Feb 20 j 22:25	2°♊22'00	
				max. Earth dist.	-5164 Jun 06 j 08:08	4°♊52'40	31.06322 AU
conjunction	-5172 May 19 j 17:41	17°♊10'50	-1°-23'-21				
minimum elong	-5172 May 19 j 17:42	17°♊10'50	1°23'19	conjunction	-5164 Jun 07 j 03:47	4°♊54'29	0°-45'-51
max. Earth dist.	-5172 May 19 j 03:14	17°♊09'30	30.98535 AU	minimum elong	-5164 Jun 07 j 03:47	4°♊54'29	0°45'43
retrograde	-5172 Aug 31 j 20:10	19°♊40'32		retrograde	-5164 Sep 18 j 09:46	7°♊22'56	
opposition	-5172 Nov 16 j 21:26	18°♊17'20	-1°-26'-49	opposition	-5164 Dec 04 j 08:20	6°♊00'18	0°-46'-20
min. Earth dist.	-5172 Nov 17 j 10:21	18°♊16'25	28.98944 AU	min. Earth dist.	-5164 Dec 05 j 02:11	5°♊59'03	29.06978 AU
direct	-5171 Feb 04 j 10:25	16°♊51'54		direct	-5163 Feb 22 j 10:34	4°♊34'53	
conjunction	-5171 May 22 j 07:20	19°♊24'21	-1°-19'-1	conjunction	-5163 Jun 09 j 16:46	7°♊07'23	0°-40'-47
minimum elong	-5171 May 22 j 07:21	19°♊24'21	1°18'57	minimum elong	-5163 Jun 09 j 16:46	7°♊07'23	0°40'38
max. Earth dist.	-5171 May 21 j 15:09	19°♊22'50	30.99221 AU	max. Earth dist.	-5163 Jun 08 j 20:47	7°♊05'32	31.07542 AU
retrograde	-5171 Sep 03 j 07:00	21°♊53'49		retrograde	-5163 Sep 20 j 20:22	9°♊35'43	
opposition	-5171 Nov 19 j 07:39	20°♊30'39	-1°-22'-8	opposition	-5163 Dec 06 j 18:47	8°♊13'11	0°-40'-53
min. Earth dist.	-5171 Nov 19 j 21:37	20°♊29'40	28.99640 AU	min. Earth dist.	-5163 Dec 07 j 12:57	8°♊11'54	29.08145 AU

Attention, astronomical year style is used: The year -5162 in astronomical counting style is the year 5163 BCE in historical counting style.

direct	-5162 Feb 25 j 00:25	6°8'47.47		conjunction	-5155 Jun 27 j 20:01	24°8'46.33	0°01'07
max. Earth dist.	-5162 Jun 11 j 08:00	9°8'18.17	31.08662 AU	minimum elong	-5155 Jun 27 j 20:02	24°8'46.33	0°01'20
				behind sun begin	-5155 Jun 27 j 13:30	24°8'45.58	
conjunction	-5162 Jun 12 j 05:40	9°8'20.18	0°-35'-40	behind sun end	-5155 Jun 28 j 02:34	24°8'47.08	
minimum elong	-5162 Jun 12 j 05:41	9°8'20.18	0°35'32	max. Earth dist.	-5155 Jun 26 j 19:41	24°8'44.18	31.14885 AU
retrograde	-5162 Sep 23 j 07:47	11°8'48.30		retrograde	-5155 Oct 08 j 05:14	27°8'13.45	
opposition	-5162 Dec 09 j 05:26	10°8'26.02	0°-35'-23	opposition	-5155 Dec 24 j 07:50	25°8'51.32	0°03'55
min. Earth dist.	-5162 Dec 10 j 00:34	10°8'24.42	29.09219 AU	min. Earth dist.	-5155 Dec 25 j 06:01	25°8'49.59	29.15446 AU
direct	-5161 Feb 27 j 11:57	9°8'00.39		direct	-5154 Mar 15 j 01:08	24°8'26.03	
				max. Earth dist.	-5154 Jun 29 j 07:58	26°8'55.58	31.15970 AU
conjunction	-5161 Jun 14 j 18:28	11°8'33.09	0°-30'-30				
minimum elong	-5161 Jun 14 j 18:28	11°8'33.09	0°30'20	conjunction	-5154 Jun 30 j 07:56	26°8'58.12	0°06'25
max. Earth dist.	-5161 Jun 13 j 21:04	11°8'31.10	31.09677 AU	minimum elong	-5154 Jun 30 j 07:56	26°8'58.12	0°06'38
retrograde	-5161 Sep 25 j 17:40	14°8'01.12		behind sun begin	-5154 Jun 30 j 01:49	26°8'57.39	
opposition	-5161 Dec 11 j 16:08	12°8'38.49	0°-29'-50	behind sun end	-5154 Jun 30 j 14:02	26°8'58.45	
min. Earth dist.	-5161 Dec 12 j 12:10	12°8'37.25	29.10172 AU	retrograde	-5154 Oct 10 j 15:22	29°8'25.17	
direct	-5160 Mar 01 j 01:13	11°8'13.25		opposition	-5154 Dec 26 j 18:36	28°8'03.08	0°09'34
max. Earth dist.	-5160 Jun 15 j 07:51	13°8'43.44	31.10590 AU	min. Earth dist.	-5154 Dec 27 j 16:26	28°8'01.38	29.16564 AU
				direct	-5153 Mar 17 j 14:36	26°8'37.43	
conjunction	-5160 Jun 16 j 07:04	13°8'45.53	0°-25'-17				
minimum elong	-5160 Jun 16 j 07:04	13°8'45.53	0°25'08	conjunction	-5153 Jul 02 j 19:31	29°8'09.49	0°11'40
	-5160 Jul 20 j 22:40	15°8'		minimum elong	-5153 Jul 02 j 19:32	29°8'09.49	0°11'55
retrograde	-5160 Sep 27 j 04:31	16°8'13.48		behind sun begin	-5153 Jul 02 j 15:02	29°8'09.25	
	-5160 Dec 07 j 23:49	15°8'		behind sun end	-5153 Jul 03 j 00:01	29°8'10.13	
opposition	-5160 Dec 13 j 02:37	14°8'51.26	0°-24'-15	max. Earth dist.	-5153 Jul 01 j 18:43	29°8'07.31	31.17126 AU
min. Earth dist.	-5160 Dec 13 j 22:45	14°8'50.02	29.11049 AU		-5153 Jul 25 j 16:05	0°II	
direct	-5159 Mar 03 j 12:40	13°8'26.02		retrograde	-5153 Oct 13 j 03:00	1°II36.50	
	-5159 May 22 j 22:36	15°8'		opposition	-5153 Dec 29 j 05:25	0°II14.46	0°15'12
				min. Earth dist.	-5153 Dec 30 j 03:33	0°II13.14	29.17752 AU
conjunction	-5159 Jun 18 j 19:39	15°8'58.27	0°-20'-3		-5152 Jan 07 j 03:27	30°R8	
minimum elong	-5159 Jun 18 j 19:40	15°8'58.27	0°19'52	direct	-5152 Mar 19 j 02:11	28°8'49.23	
max. Earth dist.	-5159 Jun 17 j 20:52	15°8'56.20	31.11429 AU		-5152 May 26 j 19:22	0°II	
retrograde	-5159 Sep 29 j 12:14	18°8'26.12		max. Earth dist.	-5152 Jul 03 j 07:20	1°II19.15	31.18314 AU
opposition	-5159 Dec 15 j 13:19	17°8'03.52	0°-18'-39				
min. Earth dist.	-5159 Dec 16 j 10:48	17°8'02.22	29.11857 AU	conjunction	-5152 Jul 04 j 07:17	1°II21.28	0°16'56
direct	-5158 Mar 06 j 01:01	15°8'38.26		minimum elong	-5152 Jul 04 j 07:16	1°II21.28	0°17'10
max. Earth dist.	-5158 Jun 20 j 07:45	18°8'08.33	31.12230 AU	retrograde	-5152 Oct 14 j 12:59	3°II48.24	
				opposition	-5152 Dec 30 j 16:14	2°II26.25	0°20'49
conjunction	-5158 Jun 21 j 07:58	18°8'10.48	0°-14'-48	min. Earth dist.	-5152 Dec 31 j 15:00	2°II24.50	29.18924 AU
minimum elong	-5158 Jun 21 j 07:57	18°8'10.48	0°14'37	direct	-5151 Mar 21 j 15:41	1°II01.06	
behind sun begin	-5158 Jun 21 j 05:18	18°8'10.34					
behind sun end	-5158 Jun 21 j 10:37	18°8'11.02		conjunction	-5151 Jul 06 j 18:51	3°II33.10	0°22'09
retrograde	-5158 Oct 01 j 22:49	20°8'38.23		minimum elong	-5151 Jul 06 j 18:51	3°II33.10	0°22'25
opposition	-5158 Dec 17 j 23:50	19°8'16.05	0°-13'-1	max. Earth dist.	-5151 Jul 05 j 17:30	3°II30.48	31.19460 AU
min. Earth dist.	-5158 Dec 18 j 20:48	19°8'14.37	29.12655 AU	retrograde	-5151 Oct 17 j 00:07	6°II00.02	
direct	-5157 Mar 08 j 12:53	17°8'50.37		opposition	-5150 Jan 02 j 03:09	4°II38.06	0°26'23
				min. Earth dist.	-5150 Jan 03 j 01:42	4°II36.33	29.20035 AU
conjunction	-5157 Jun 23 j 20:13	20°8'22.55	0°-9'-32	direct	-5150 Mar 24 j 03:20	3°II12.50	
minimum elong	-5157 Jun 23 j 20:13	20°8'22.55	0°09'20	max. Earth dist.	-5150 Jul 08 j 05:49	5°II42.34	31.20504 AU
behind sun begin	-5157 Jun 23 j 14:45	20°8'22.25					
behind sun end	-5157 Jun 24 j 01:42	20°8'23.24		conjunction	-5150 Jul 09 j 06:31	5°II44.52	0°27'21
max. Earth dist.	-5157 Jun 22 j 20:26	20°8'20.42	31.13037 AU	minimum elong	-5150 Jul 09 j 06:31	5°II44.52	0°27'36
retrograde	-5157 Oct 04 j 07:46	22°8'50.22		retrograde	-5150 Oct 19 j 08:24	8°II11.40	
opposition	-5157 Dec 20 j 10:37	21°8'28.04	0°-7'-22	opposition	-5149 Jan 04 j 14:18	6°II49.48	0°31'55
min. Earth dist.	-5157 Dec 21 j 08:49	21°8'26.32	29.13495 AU	min. Earth dist.	-5149 Jan 05 j 14:05	6°II48.10	29.21021 AU
direct	-5156 Mar 09 j 23:22	20°8'02.35		direct	-5149 Mar 26 j 15:32	5°II24.34	
max. Earth dist.	-5156 Jun 24 j 07:57	22°8'32.34	31.13918 AU				
				conjunction	-5149 Jul 11 j 17:57	7°II56.33	0°32'31
conjunction	-5156 Jun 25 j 08:05	22°8'34.49	0°-4'-17	minimum elong	-5149 Jul 11 j 17:57	7°II56.33	0°32'46
minimum elong	-5156 Jun 25 j 08:04	22°8'34.49	0°04'05	max. Earth dist.	-5149 Jul 10 j 15:56	7°II54.08	31.21427 AU
behind sun begin	-5156 Jun 25 j 01:38	22°8'34.14		retrograde	-5149 Oct 21 j 19:16	10°II23.17	
behind sun end	-5156 Jun 25 j 14:31	22°8'35.23		opposition	-5148 Jan 07 j 01:21	9°II01.28	0°37'25
retrograde	-5156 Oct 05 j 18:24	25°8'02.07		min. Earth dist.	-5148 Jan 08 j 00:32	8°II59.52	29.21880 AU
opposition	-5156 Dec 21 j 21:13	23°8'39.52	0°-1'-43	direct	-5148 Mar 28 j 03:08	7°II36.15	
min. Earth dist.	-5156 Dec 22 j 18:36	23°8'38.23	29.14415 AU	max. Earth dist.	-5148 Jul 12 j 03:35	10°II05.47	31.22207 AU
direct	-5155 Mar 12 j 13:31	22°8'14.23					
asc. node	-5155 Apr 13 j 18:27	22°8'30.55		conjunction	-5148 Jul 13 j 05:19	10°II08.10	0°37'37

Attention, astronomical year style is used: The year -5148 in astronomical counting style is the year 5149 BCE in historical counting style.

minimum elong	-5148 Jul 13 j 05:19	10°II08'10	0°37'52			-5140 Nov 22 j 03:49	30°RII	
retrograde	-5148 Oct 23 j 04:13	12°II34'50		opposition		-5139 Jan 26 j 06:16	28°II41'00	1°23'13
opposition	-5147 Jan 08 j 12:34	11°II13'02	0°42'50	min. Earth dist.		-5139 Jan 27 j 04:39	28°II39'28	29.27777 AU
min. Earth dist.	-5147 Jan 09 j 13:09	11°II11'20	29.22600 AU	direct		-5139 Apr 17 j 17:17	27°II16'00	
direct	-5147 Mar 30 j 13:42	9°II47'50		max. Earth dist.		-5139 Aug 01 j 05:29	29°II45'03	31.28093 AU
conjunction	-5147 Jul 15 j 16:33	12°II19'41	0°42'40	conjunction		-5139 Aug 02 j 05:30	29°II47'18	1°20'06
minimum elong	-5147 Jul 15 j 16:33	12°II19'41	0°42'56	minimum elong		-5139 Aug 02 j 05:29	29°II47'18	1°20'23
max. Earth dist.	-5147 Jul 14 j 14:18	12°II17'14	31.22866 AU			-5139 Aug 07 j 21:25	0°☾	
retrograde	-5147 Oct 25 j 14:26	14°II46'15		retrograde		-5139 Nov 11 j 22:47	2°☾13'34	
opposition	-5146 Jan 10 j 23:31	13°II24'28	0°48'12	opposition		-5138 Jan 28 j 17:46	0°☾51'55	1°27'48
min. Earth dist.	-5146 Jan 11 j 23:28	13°II22'49	29.23199 AU	min. Earth dist.		-5138 Jan 29 j 17:09	0°☾50'19	29.28571 AU
direct	-5146 Apr 02 j 03:25	11°II59'15				-5138 Mar 03 j 19:57	30°RII	
max. Earth dist.	-5146 Jul 17 j 01:11	14°II28'34	31.23416 AU	direct		-5138 Apr 20 j 03:46	29°II27'00	
						-5138 Jun 05 j 02:10	0°☾	
conjunction	-5146 Jul 18 j 03:42	14°II31'02	0°47'39	conjunction		-5138 Aug 04 j 15:47	1°☾58'13	1°24'19
minimum elong	-5146 Jul 18 j 03:41	14°II31'02	0°47'55	minimum elong		-5138 Aug 04 j 15:47	1°☾58'13	1°24'36
retrograde	-5146 Oct 28 j 01:10	16°II57'32		max. Earth dist.		-5138 Aug 03 j 15:49	1°☾55'58	31.28850 AU
opposition	-5145 Jan 13 j 10:46	15°II35'44	0°53'29	retrograde		-5138 Nov 14 j 08:38	4°☾24'29	
min. Earth dist.	-5145 Jan 14 j 11:30	15°II34'02	29.23733 AU	opposition		-5137 Jan 31 j 05:22	3°☾02'52	1°32'15
direct	-5145 Apr 04 j 14:37	14°II10'31		min. Earth dist.		-5137 Feb 01 j 03:44	3°☾01'21	29.29279 AU
				direct		-5137 Apr 22 j 16:24	1°☾38'00	
conjunction	-5145 Jul 20 j 14:31	16°II42'12	0°52'33	max. Earth dist.		-5137 Aug 06 j 01:53	4°☾06'53	31.29489 AU
minimum elong	-5145 Jul 20 j 14:30	16°II42'12	0°52'50					
max. Earth dist.	-5145 Jul 19 j 12:37	16°II39'47	31.23930 AU	conjunction		-5137 Aug 07 j 01:56	4°☾09'08	1°28'25
retrograde	-5145 Oct 30 j 10:42	19°II08'38		minimum elong		-5137 Aug 07 j 01:56	4°☾09'08	1°28'42
opposition	-5144 Jan 15 j 21:58	17°II46'50	0°58'41	retrograde		-5137 Nov 16 j 19:18	6°☾35'26	
min. Earth dist.	-5144 Jan 16 j 22:12	17°II45'10	29.24238 AU	opposition		-5136 Feb 02 j 17:07	5°☾13'49	1°36'34
direct	-5144 Apr 06 j 03:56	16°II21'37		min. Earth dist.		-5136 Feb 03 j 16:04	5°☾12'15	29.29873 AU
max. Earth dist.	-5144 Jul 20 j 22:43	18°II50'44	31.24443 AU	direct		-5136 Apr 24 j 02:12	3°☾48'58	
conjunction	-5144 Jul 22 j 01:12	18°II53'13	0°57'22	conjunction		-5136 Aug 08 j 12:11	6°☾20'02	1°32'24
minimum elong	-5144 Jul 22 j 01:12	18°II53'12	0°57'39	minimum elong		-5136 Aug 08 j 12:10	6°☾20'02	1°32'40
retrograde	-5144 Oct 31 j 22:10	21°II19'34		max. Earth dist.		-5136 Aug 07 j 12:45	6°☾17'50	31.30008 AU
opposition	-5143 Jan 17 j 09:01	19°II57'46	1°03'47	retrograde		-5136 Nov 18 j 05:01	8°☾46'18	
min. Earth dist.	-5143 Jan 18 j 09:09	19°II56'06	29.24794 AU	opposition		-5135 Feb 04 j 04:41	7°☾24'41	1°40'44
direct	-5143 Apr 08 j 15:53	18°II32'33		min. Earth dist.		-5135 Feb 05 j 03:14	7°☾23'09	29.30317 AU
max. Earth dist.	-5143 Jul 23 j 10:49	21°II01'44	31.25025 AU	direct		-5135 Apr 26 j 15:10	5°☾59'52	
conjunction	-5143 Jul 24 j 11:56	21°II04'04	1°02'07	conjunction		-5135 Aug 10 j 22:17	8°☾30'49	1°36'14
minimum elong	-5143 Jul 24 j 11:56	21°II04'04	1°02'24	minimum elong		-5135 Aug 10 j 22:17	8°☾30'49	1°36'31
retrograde	-5143 Nov 03 j 07:59	23°II30'23		max. Earth dist.		-5135 Aug 09 j 22:03	8°☾28'33	31.30379 AU
opposition	-5142 Jan 19 j 20:19	22°II08'35	1°08'48	retrograde		-5135 Nov 20 j 16:54	10°☾57'05	
min. Earth dist.	-5142 Jan 20 j 20:26	22°II06'55	29.25416 AU	opposition		-5134 Feb 06 j 16:26	9°☾35'26	1°44'46
direct	-5142 Apr 11 j 05:58	20°II43'24		min. Earth dist.		-5134 Feb 07 j 14:55	9°☾33'54	29.30637 AU
				direct		-5134 Apr 29 j 02:56	8°☾10'38	
conjunction	-5142 Jul 26 j 22:20	23°II14'51	1°06'46	max. Earth dist.		-5134 Aug 12 j 09:24	10°☾39'20	31.30631 AU
minimum elong	-5142 Jul 26 j 22:20	23°II14'51	1°07'02					
max. Earth dist.	-5142 Jul 25 j 20:36	23°II12'27	31.25696 AU	conjunction		-5134 Aug 13 j 08:17	10°☾41'28	1°39'56
retrograde	-5142 Nov 05 j 18:46	25°II41'08		minimum elong		-5134 Aug 13 j 08:16	10°☾41'28	1°40'13
opposition	-5141 Jan 22 j 07:33	24°II19'21	1°13'43	retrograde		-5134 Nov 23 j 02:39	13°☾07'43	
min. Earth dist.	-5141 Jan 23 j 06:36	24°II17'46	29.26144 AU	opposition		-5133 Feb 09 j 04:19	11°☾46'01	1°48'38
direct	-5141 Apr 13 j 17:31	22°II54'13		min. Earth dist.		-5133 Feb 10 j 02:54	11°☾44'29	29.30839 AU
max. Earth dist.	-5141 Jul 28 j 08:35	25°II23'21	31.26460 AU	direct		-5133 May 01 j 16:47	10°☾21'13	
conjunction	-5141 Jul 29 j 08:53	25°II25'37	1°11'19	conjunction		-5133 Aug 15 j 18:03	12°☾51'57	1°43'29
minimum elong	-5141 Jul 29 j 08:53	25°II25'37	1°11'36	minimum elong		-5133 Aug 15 j 18:03	12°☾51'56	1°43'46
retrograde	-5141 Nov 08 j 02:58	27°II51'53		max. Earth dist.		-5133 Aug 14 j 18:33	12°☾49'44	31.30801 AU
opposition	-5140 Jan 24 j 18:58	26°II30'09	1°18'32	retrograde		-5133 Nov 25 j 13:37	15°☾18'11	
min. Earth dist.	-5140 Jan 25 j 18:32	26°II28'32	29.26946 AU	opposition		-5132 Feb 11 j 15:59	13°☾56'26	1°52'21
direct	-5140 Apr 15 j 05:46	25°II05'05		min. Earth dist.		-5132 Feb 12 j 13:28	13°☾54'58	29.31001 AU
				direct		-5132 May 03 j 04:20	12°☾31'37	
conjunction	-5140 Jul 30 j 19:06	27°II36'25	1°15'46	max. Earth dist.		-5132 Aug 16 j 05:46	15°☾00'10	31.30942 AU
minimum elong	-5140 Jul 30 j 19:05	27°II36'25	1°16'03					
max. Earth dist.	-5140 Jul 29 j 18:19	27°II34'06	31.27286 AU	conjunction		-5132 Aug 17 j 03:45	15°☾02'13	1°46'53
	-5140 Oct 28 j 01:37	0°☾		minimum elong		-5132 Aug 17 j 03:44	15°☾02'13	1°47'10
retrograde	-5140 Nov 09 j 13:55	0°☾02'41						

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Attention, astronomical year style is used: The year -5132 in astronomical counting style is the year 5133 BCE in historical counting style.

retrograde	-5132 Nov 26 j 22:09	17° \mathring{E} 28'27		minimum elong	-5124 Sep 03 j 06:44	2° \mathring{O} 24'17	2°08'30
opposition	-5131 Feb 13 j 03:51	16° \mathring{E} 06'39	1°55'55	max. Earth dist.	-5124 Sep 02 j 13:25	2° \mathring{O} 22'39	31.33721 AU
min. Earth dist.	-5131 Feb 14 j 01:38	16° \mathring{E} 05'10	29.31154 AU	retrograde	-5124 Dec 14 j 11:29	4° \mathring{O} 51'06	
direct	-5131 May 05 j 17:29	14° \mathring{E} 41'52		opposition	-5123 Mar 03 j 04:19	3° \mathring{O} 29'18	2°18'01
				min. Earth dist.	-5123 Mar 03 j 20:10	3° \mathring{O} 28'14	29.33961 AU
conjunction	-5131 Aug 19 j 13:13	17° \mathring{E} 12'21	1°50'08	direct	-5123 May 23 j 11:28	2° \mathring{O} 05'05	
minimum elong	-5131 Aug 19 j 13:13	17° \mathring{E} 12'21	1°50'25				
max. Earth dist.	-5131 Aug 18 j 15:12	17° \mathring{E} 10'17	31.31118 AU	conjunction	-5123 Sep 05 j 16:08	4° \mathring{O} 34'58	2°10'08
retrograde	-5131 Nov 29 j 08:49	19° \mathring{E} 38'35		minimum elong	-5123 Sep 05 j 16:08	4° \mathring{O} 34'58	2°10'23
opposition	-5130 Feb 15 j 15:34	18° \mathring{E} 16'45	1°59'18	max. Earth dist.	-5123 Sep 05 j 00:05	4° \mathring{O} 33'28	31.33821 AU
min. Earth dist.	-5130 Feb 16 j 11:37	18° \mathring{E} 15'23	29.31368 AU	retrograde	-5123 Dec 16 j 21:11	7° \mathring{O} 01'51	
direct	-5130 May 08 j 05:45	16° \mathring{E} 51'59		opposition	-5122 Mar 05 j 16:49	5° \mathring{O} 40'02	2°19'56
				min. Earth dist.	-5122 Mar 06 j 09:07	5° \mathring{O} 38'56	29.33988 AU
conjunction	-5130 Aug 21 j 22:45	19° \mathring{E} 22'22	1°53'14	direct	-5122 May 26 j 01:04	4° \mathring{O} 15'52	
minimum elong	-5130 Aug 21 j 22:45	19° \mathring{E} 22'22	1°53'30	max. Earth dist.	-5122 Sep 07 j 09:11	6° \mathring{O} 44'07	31.33783 AU
max. Earth dist.	-5130 Aug 21 j 01:59	19° \mathring{E} 20'25	31.31368 AU				
retrograde	-5130 Dec 01 j 17:43	21° \mathring{E} 48'39		conjunction	-5122 Sep 08 j 01:23	6° \mathring{O} 45'39	2°11'50
opposition	-5129 Feb 18 j 03:35	20° \mathring{E} 26'48	2°02'31	minimum elong	-5122 Sep 08 j 01:23	6° \mathring{O} 45'39	2°12'04
min. Earth dist.	-5129 Feb 18 j 23:50	20° \mathring{E} 25'26	29.31682 AU	retrograde	-5122 Dec 19 j 09:03	9° \mathring{O} 12'35	
direct	-5129 May 10 j 16:31	19° \mathring{E} 02'05		opposition	-5121 Mar 08 j 05:14	7° \mathring{O} 50'43	2°21'39
				min. Earth dist.	-5121 Mar 08 j 19:58	7° \mathring{O} 49'43	29.33881 AU
conjunction	-5129 Aug 24 j 08:03	21° \mathring{E} 32'23	1°56'09	direct	-5121 May 28 j 13:58	6° \mathring{O} 26'34	
minimum elong	-5129 Aug 24 j 08:02	21° \mathring{E} 32'23	1°56'26				
max. Earth dist.	-5129 Aug 23 j 12:11	21° \mathring{E} 30'31	31.31735 AU	conjunction	-5121 Sep 10 j 10:32	8° \mathring{O} 56'14	2°13'21
retrograde	-5129 Dec 04 j 03:19	23° \mathring{E} 58'43		minimum elong	-5121 Sep 10 j 10:32	8° \mathring{O} 56'14	2°13'35
opposition	-5128 Feb 20 j 15:28	22° \mathring{E} 36'53	2°05'34	max. Earth dist.	-5121 Sep 09 j 19:13	8° \mathring{O} 54'47	31.33608 AU
min. Earth dist.	-5128 Feb 21 j 10:00	22° \mathring{E} 35'38	29.32088 AU	retrograde	-5121 Dec 21 j 17:58	11° \mathring{O} 23'15	
direct	-5128 May 12 j 04:26	21° \mathring{E} 12'15		opposition	-5120 Mar 09 j 17:46	10° \mathring{O} 01'17	2°23'10
				min. Earth dist.	-5120 Mar 10 j 08:59	10° \mathring{O} 00'16	29.33664 AU
conjunction	-5128 Aug 25 j 17:25	23° \mathring{E} 42'29	1°58'55	direct	-5120 May 30 j 01:26	8° \mathring{O} 37'10	
minimum elong	-5128 Aug 25 j 17:25	23° \mathring{E} 42'29	1°59'11				
max. Earth dist.	-5128 Aug 24 j 21:58	23° \mathring{E} 40'39	31.32170 AU	conjunction	-5120 Sep 11 j 19:38	11° \mathring{O} 06'41	2°14'40
retrograde	-5128 Dec 05 j 14:11	26° \mathring{E} 08'54		minimum elong	-5120 Sep 11 j 19:38	11° \mathring{O} 06'41	2°14'53
opposition	-5127 Feb 22 j 03:21	24° \mathring{E} 47'05	2°08'26	max. Earth dist.	-5120 Sep 11 j 05:12	11° \mathring{O} 05'19	31.33357 AU
min. Earth dist.	-5127 Feb 22 j 21:52	24° \mathring{E} 45'50	29.32559 AU	retrograde	-5120 Dec 23 j 02:54	13° \mathring{O} 33'44	
direct	-5127 May 14 j 13:13	23° \mathring{E} 22'32		opposition	-5119 Mar 12 j 06:01	12° \mathring{O} 11'43	2°24'29
max. Earth dist.	-5127 Aug 27 j 08:45	25° \mathring{E} 51'01	31.32648 AU	min. Earth dist.	-5119 Mar 12 j 19:36	12° \mathring{O} 10'48	29.33386 AU
				direct	-5119 Jun 01 j 14:01	10° \mathring{O} 47'35	
conjunction	-5127 Aug 28 j 02:51	25° \mathring{E} 52'43	2°01'31				
minimum elong	-5127 Aug 28 j 02:50	25° \mathring{E} 52'43	2°01'47	conjunction	-5119 Sep 14 j 04:37	13° \mathring{O} 16'59	2°15'48
retrograde	-5127 Dec 08 j 00:14	28° \mathring{E} 19'14		minimum elong	-5119 Sep 14 j 04:37	13° \mathring{O} 16'59	2°16'01
opposition	-5126 Feb 24 j 15:29	26° \mathring{E} 57'27	2°11'07	max. Earth dist.	-5119 Sep 13 j 14:35	13° \mathring{O} 15'40	31.33072 AU
min. Earth dist.	-5126 Feb 25 j 09:03	26° \mathring{E} 56'15	29.33025 AU		-5119 Nov 03 j 13:30	15° \mathring{O}	
direct	-5126 May 17 j 01:22	25° \mathring{E} 33'00		retrograde	-5119 Dec 25 j 13:24	15° \mathring{O} 44'07	
					-5118 Feb 18 j 08:39	15° \mathring{R} \mathring{O}	
conjunction	-5126 Aug 30 j 12:02	28° \mathring{E} 03'06	2°03'56	opposition	-5118 Mar 14 j 18:35	14° \mathring{O} 22'00	2°25'35
minimum elong	-5126 Aug 30 j 12:02	28° \mathring{E} 03'06	2°04'12	min. Earth dist.	-5118 Mar 15 j 07:50	14° \mathring{O} 21'07	29.33126 AU
max. Earth dist.	-5126 Aug 29 j 17:40	28° \mathring{E} 01'23	31.33093 AU	direct	-5118 Jun 03 j 23:41	12° \mathring{O} 57'54	
	-5126 Oct 29 j 06:39	0° \mathring{O}			-5118 Sep 04 j 11:55	15° \mathring{O}	
retrograde	-5126 Dec 10 j 12:56	0° \mathring{O} 29'44					
	-5125 Jan 23 j 09:39	30° \mathring{R} \mathring{E}		conjunction	-5118 Sep 16 j 13:31	15° \mathring{O} 27'09	2°16'44
opposition	-5125 Feb 27 j 03:45	29° \mathring{E} 07'57	2°13'36	minimum elong	-5118 Sep 16 j 13:31	15° \mathring{O} 27'09	2°16'57
min. Earth dist.	-5125 Feb 27 j 20:46	29° \mathring{E} 06'48	29.33452 AU	max. Earth dist.	-5118 Sep 16 j 01:19	15° \mathring{O} 26'00	31.32835 AU
direct	-5125 May 19 j 11:59	27° \mathring{E} 43'36		retrograde	-5118 Dec 27 j 23:01	17° \mathring{O} 54'22	
	-5125 Aug 26 j 20:15	0° \mathring{O}		opposition	-5117 Mar 17 j 07:08	16° \mathring{O} 32'12	2°26'30
				min. Earth dist.	-5117 Mar 17 j 18:54	16° \mathring{O} 31'24	29.32918 AU
conjunction	-5125 Sep 01 j 21:29	0° \mathring{O} 13'39	2°06'11	direct	-5117 Jun 06 j 12:16	15° \mathring{O} 08'07	
minimum elong	-5125 Sep 01 j 21:29	0° \mathring{O} 13'39	2°06'27				
max. Earth dist.	-5125 Sep 01 j 04:45	0° \mathring{O} 12'04	31.33466 AU	conjunction	-5117 Sep 18 j 22:21	17° \mathring{O} 37'16	2°17'29
retrograde	-5125 Dec 12 j 23:36	2° \mathring{O} 40'22		minimum elong	-5117 Sep 18 j 22:21	17° \mathring{O} 37'16	2°17'41
opposition	-5124 Feb 29 j 16:01	1° \mathring{O} 18'35	2°15'54	max. Earth dist.	-5117 Sep 18 j 10:14	17° \mathring{O} 36'07	31.32670 AU
min. Earth dist.	-5124 Mar 01 j 09:02	1° \mathring{O} 17'26	29.33772 AU	retrograde	-5117 Dec 30 j 11:08	20° \mathring{O} 04'35	
	-5124 May 02 j 00:19	30° \mathring{R} \mathring{E}		opposition	-5116 Mar 18 j 19:32	18° \mathring{O} 42'21	2°27'11
direct	-5124 May 21 j 00:33	29° \mathring{E} 54'18		min. Earth dist.	-5116 Mar 19 j 06:13	18° \mathring{O} 41'38	29.32805 AU
	-5124 Jun 08 j 19:21	0° \mathring{O}		direct	-5116 Jun 07 j 21:50	17° \mathring{O} 18'20	
conjunction	-5124 Sep 03 j 06:45	2° \mathring{O} 24'17	2°08'15	conjunction	-5116 Sep 20 j 07:20	19° \mathring{O} 47'23	2°18'02

Attention, astronomical year style is used: The year -5116 in astronomical counting style is the year 5117 BCE in historical counting style.

minimum elong	-5116 Sep 20 j 07:20	19°04'23	2°18'14	minimum elong	-5108 Oct 07 j 06:52	7°00'12'03	2°15'25
max. Earth dist.	-5116 Sep 19 j 21:19	19°04'27	31.32587 AU	max. Earth dist.	-5108 Oct 07 j 01:51	7°00'11'35	31.30059 AU
retrograde	-5116 Dec 31 j 21:32	22°01'45'0		retrograde	-5107 Jan 18 j 15:17	9°00'40'37	
opposition	-5115 Mar 21 j 08:07	20°02'52'34	2°27'40	opposition	-5107 Apr 08 j 14:47	8°00'17'57	2°23'54
min. Earth dist.	-5115 Mar 21 j 18:14	20°02'51'53	29.32741 AU	min. Earth dist.	-5107 Apr 08 j 18:28	8°00'17'42	29.29824 AU
direct	-5115 Jun 10 j 09:16	19°02'28'37		direct	-5107 Jun 28 j 04:27	6°00'54'27	
conjunction	-5115 Sep 22 j 16:02	21°02'57'35	2°18'23	conjunction	-5107 Oct 09 j 15:43	9°00'22'44	2°14'04
minimum elong	-5115 Sep 22 j 16:03	21°02'57'35	2°18'35	minimum elong	-5107 Oct 09 j 15:44	9°00'22'44	2°14'11
max. Earth dist.	-5115 Sep 22 j 06:06	21°02'56'39	31.32549 AU	max. Earth dist.	-5107 Oct 09 j 12:47	9°00'22'27	31.29248 AU
retrograde	-5114 Jan 03 j 09:57	24°02'25'10		retrograde	-5106 Jan 21 j 01:33	11°00'51'24	
opposition	-5114 Mar 23 j 20:43	23°02'02'53	2°27'56	opposition	-5106 Apr 11 j 03:47	10°00'28'38	2°22'30
min. Earth dist.	-5114 Mar 24 j 05:08	23°02'02'19	29.32711 AU	min. Earth dist.	-5106 Apr 11 j 06:49	10°00'28'26	29.29001 AU
direct	-5114 Jun 12 j 19:41	21°02'39'01		direct	-5106 Jun 30 j 15:41	9°00'05'10	
conjunction	-5114 Sep 25 j 01:00	24°02'07'55	2°18'32	conjunction	-5106 Oct 12 j 00:30	11°00'33'19	2°12'40
minimum elong	-5114 Sep 25 j 01:00	24°02'07'55	2°18'43	minimum elong	-5106 Oct 12 j 00:30	11°00'33'19	2°12'46
max. Earth dist.	-5114 Sep 24 j 16:43	24°02'07'09	31.32509 AU	max. Earth dist.	-5106 Oct 11 j 21:48	11°00'33'04	31.28450 AU
retrograde	-5113 Jan 05 j 20:54	26°02'35'39		retrograde	-5105 Jan 23 j 14:10	14°00'02'08	
opposition	-5113 Mar 26 j 09:34	25°02'13'20	2°27'59	opposition	-5105 Apr 13 j 16:36	12°00'39'16	2°20'54
min. Earth dist.	-5113 Mar 26 j 18:02	25°02'12'46	29.32655 AU	min. Earth dist.	-5105 Apr 13 j 17:45	12°00'39'11	29.28233 AU
direct	-5113 Jun 15 j 08:14	23°02'49'34		direct	-5105 Jul 03 j 02:00	11°00'15'48	
conjunction	-5113 Sep 27 j 09:49	26°02'18'24	2°18'29	conjunction	-5105 Oct 14 j 09:20	13°00'43'52	2°11'04
minimum elong	-5113 Sep 27 j 09:49	26°02'18'24	2°18'39	minimum elong	-5105 Oct 14 j 09:21	13°00'43'52	2°11'10
max. Earth dist.	-5113 Sep 27 j 01:52	26°02'17'39	31.32429 AU	max. Earth dist.	-5105 Oct 14 j 08:26	13°00'43'47	31.27711 AU
retrograde	-5112 Jan 08 j 09:30	28°02'46'15		retrograde	-5104 Jan 26 j 01:37	16°00'12'49	
opposition	-5112 Mar 27 j 22:16	27°02'23'56	2°27'50	opposition	-5104 Apr 15 j 05:33	14°00'49'52	2°19'05
min. Earth dist.	-5112 Mar 28 j 04:58	27°02'23'29	29.32524 AU	min. Earth dist.	-5104 Apr 15 j 06:21	14°00'49'49	29.27533 AU
direct	-5112 Jun 16 j 20:26	26°02'00'14		direct	-5104 Jul 04 j 14:22	13°00'26'28	
conjunction	-5112 Sep 28 j 18:50	28°02'29'00	2°18'14	conjunction	-5104 Oct 15 j 18:09	15°00'54'27	2°09'17
minimum elong	-5112 Sep 28 j 18:50	28°02'29'00	2°18'23	minimum elong	-5104 Oct 15 j 18:09	15°00'54'27	2°09'21
max. Earth dist.	-5112 Sep 28 j 11:38	28°02'28'20	31.32234 AU	max. Earth dist.	-5104 Oct 15 j 18:03	15°00'54'26	31.27067 AU
retrograde	-5112 Nov 10 j 23:21	0°00'00'00		retrograde	-5103 Jan 27 j 14:41	18°00'23'33	
opposition	-5111 Jan 09 j 19:35	0°00'57'01		opposition	-5103 Apr 17 j 18:15	17°00'00'32	2°17'05
min. Earth dist.	-5111 Mar 14 j 11:52	30°00'00'00		min. Earth dist.	-5103 Apr 17 j 16:49	17°00'00'38	29.26922 AU
direct	-5111 Mar 30 j 11:07	29°02'34'39	2°27'27	direct	-5103 Jul 07 j 01:59	15°00'37'11	
conjunction	-5111 Mar 30 j 18:16	29°02'34'10	29.32270 AU	conjunction	-5103 Oct 18 j 03:01	18°00'05'06	2°07'18
retrograde	-5111 Jun 19 j 07:31	28°02'11'02		minimum elong	-5103 Oct 18 j 03:02	18°00'05'06	2°07'23
direct	-5111 Sep 13 j 10:25	0°00'00'00		max. Earth dist.	-5103 Oct 18 j 04:01	18°00'05'12	31.26496 AU
conjunction	-5111 Oct 01 j 03:55	0°00'39'44	2°17'47	retrograde	-5102 Jan 30 j 01:15	20°00'34'23	
minimum elong	-5111 Oct 01 j 03:55	0°00'39'44	2°17'56	opposition	-5102 Apr 20 j 07:19	19°00'11'19	2°14'52
max. Earth dist.	-5111 Sep 30 j 21:41	0°00'39'08	31.31915 AU	min. Earth dist.	-5102 Apr 20 j 05:47	19°00'11'25	29.26383 AU
retrograde	-5110 Jan 12 j 05:46	3°00'07'53		direct	-5102 Jul 09 j 12:46	17°00'48'02	
opposition	-5110 Apr 02 j 00:02	1°00'45'28	2°26'53	conjunction	-5102 Oct 20 j 11:53	20°00'15'53	2°05'08
min. Earth dist.	-5110 Apr 02 j 05:37	1°00'45'06	29.31865 AU	minimum elong	-5102 Oct 20 j 11:53	20°00'15'53	2°05'12
direct	-5110 Jun 21 j 20:12	0°00'21'55		max. Earth dist.	-5102 Oct 20 j 14:30	20°00'16'08	31.25990 AU
conjunction	-5110 Oct 03 j 12:50	2°00'50'31	2°17'09	retrograde	-5101 Feb 01 j 12:12	22°00'45'20	
minimum elong	-5110 Oct 03 j 12:50	2°00'50'31	2°17'17	opposition	-5101 Apr 22 j 20:14	21°00'22'14	2°12'28
max. Earth dist.	-5110 Oct 03 j 06:35	2°00'49'55	31.31432 AU	min. Earth dist.	-5101 Apr 22 j 16:48	21°00'22'27	29.25873 AU
retrograde	-5109 Jan 14 j 17:08	5°00'18'49		direct	-5101 Jul 12 j 01:40	19°00'59'01	
opposition	-5109 Apr 04 j 13:06	3°00'56'20	2°26'05	conjunction	-5101 Oct 22 j 20:51	22°00'26'49	2°02'48
min. Earth dist.	-5109 Apr 04 j 18:39	3°00'55'58	29.31312 AU	minimum elong	-5101 Oct 22 j 20:52	22°00'26'49	2°02'51
direct	-5109 Jun 24 j 06:10	2°00'32'49		max. Earth dist.	-5101 Oct 22 j 23:39	22°00'27'05	31.25480 AU
conjunction	-5109 Oct 05 j 21:58	5°00'01'18	2°16'19	retrograde	-5100 Feb 04 j 00:21	24°00'56'26	
minimum elong	-5109 Oct 05 j 21:58	5°00'01'19	2°16'27	opposition	-5100 Apr 24 j 09:07	23°00'33'17	2°09'51
max. Earth dist.	-5109 Oct 05 j 17:14	5°00'00'52	31.30807 AU	min. Earth dist.	-5100 Apr 24 j 05:30	23°00'33'32	29.25353 AU
retrograde	-5108 Jan 17 j 03:03	7°00'29'44		direct	-5100 Jul 13 j 11:50	22°00'10'09	
opposition	-5108 Apr 06 j 01:52	6°00'07'11	2°25'06	conjunction	-5100 Oct 24 j 06:01	24°00'37'54	2°00'16
min. Earth dist.	-5108 Apr 06 j 06:23	6°00'06'52	29.30609 AU	minimum elong	-5100 Oct 24 j 06:01	24°00'37'54	2°00'19
direct	-5108 Jun 25 j 18:48	4°00'43'41		max. Earth dist.	-5100 Oct 24 j 10:33	24°00'38'19	31.24936 AU
conjunction	-5108 Oct 07 j 06:51	7°00'12'03	2°15'17	retrograde	-5099 Feb 05 j 10:27	27°00'07'41	

Planetary Phenomena of Neptune from -5400 through -4900 (UT), Astrodienst AG 7-Dez-2017 14:33, page 20

Attention, astronomical year style is used: The year -5099 in astronomical counting style is the year 5100 BCE in historical counting style.

opposition	-5099 Apr 26 j 22:08	25° $\mathring{\text{M}}$ 44'30	2°07'04	opposition	-5091 May 15 j 06:20	13° $\mathring{\text{A}}$ 14'36	1°38'33
min. Earth dist.	-5099 Apr 26 j 17:21	25° $\mathring{\text{M}}$ 44'49	29.24759 AU	min. Earth dist.	-5091 May 14 j 18:53	13° $\mathring{\text{A}}$ 15'22	29.17210 AU
direct	-5099 Jul 16 j 00:02	24° $\mathring{\text{M}}$ 21'25		direct	-5091 Aug 02 j 16:28	11° $\mathring{\text{A}}$ 51'39	
conjunction	-5099 Oct 26 j 15:00	26° $\mathring{\text{M}}$ 49'05	1°57'34	conjunction	-5091 Nov 12 j 17:22	14° $\mathring{\text{A}}$ 18'46	1°30'17
minimum elong	-5099 Oct 26 j 15:01	26° $\mathring{\text{M}}$ 49'05	1°57'36	minimum elong	-5091 Nov 12 j 17:23	14° $\mathring{\text{A}}$ 18'46	1°30'15
max. Earth dist.	-5099 Oct 26 j 19:17	26° $\mathring{\text{M}}$ 49'30	31.24304 AU	max. Earth dist.	-5091 Nov 13 j 05:55	14° $\mathring{\text{A}}$ 19'58	31.16722 AU
retrograde	-5098 Feb 07 j 22:38	29° $\mathring{\text{M}}$ 19'04		retrograde	-5090 Feb 25 j 21:26	16° $\mathring{\text{A}}$ 49'56	
opposition	-5098 Apr 29 j 11:18	27° $\mathring{\text{M}}$ 55'48	2°04'05	opposition	-5090 May 17 j 19:17	15° $\mathring{\text{A}}$ 25'58	1°34'17
min. Earth dist.	-5098 Apr 29 j 05:46	27° $\mathring{\text{M}}$ 56'11	29.24073 AU	min. Earth dist.	-5090 May 17 j 06:19	15° $\mathring{\text{A}}$ 26'51	29.16419 AU
direct	-5098 Jul 18 j 09:37	26° $\mathring{\text{M}}$ 32'46		direct	-5090 Aug 05 j 04:29	14° $\mathring{\text{A}}$ 03'05	
conjunction	-5098 Oct 29 j 00:22	29° $\mathring{\text{M}}$ 00'23	1°54'42	conjunction	-5090 Nov 15 j 02:47	16° $\mathring{\text{A}}$ 30'10	1°26'13
minimum elong	-5098 Oct 29 j 00:23	29° $\mathring{\text{M}}$ 00'23	1°54'44	minimum elong	-5090 Nov 15 j 02:48	16° $\mathring{\text{A}}$ 30'11	1°26'10
max. Earth dist.	-5098 Oct 29 j 06:20	29° $\mathring{\text{M}}$ 00'57	31.23554 AU	max. Earth dist.	-5090 Nov 15 j 15:21	16° $\mathring{\text{A}}$ 31'22	31.15987 AU
retrograde	-5098 Nov 24 j 23:20	0° $\mathring{\text{A}}$		retrograde	-5089 Feb 28 j 09:55	19° $\mathring{\text{A}}$ 01'32	
opposition	-5097 Feb 10 j 09:18	1° $\mathring{\text{A}}$ 30'30		opposition	-5089 May 20 j 08:10	17° $\mathring{\text{A}}$ 37'32	1°29'52
opposition	-5097 May 02 j 00:24	0° $\mathring{\text{A}}$ 07'10	2°00'56	min. Earth dist.	-5089 May 19 j 18:17	17° $\mathring{\text{A}}$ 38'28	29.15717 AU
min. Earth dist.	-5097 May 01 j 18:36	0° $\mathring{\text{A}}$ 07'34	29.23250 AU	direct	-5089 Aug 07 j 13:45	16° $\mathring{\text{A}}$ 14'42	
direct	-5097 May 06 j 10:42	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$		conjunction	-5089 Nov 17 j 12:26	18° $\mathring{\text{A}}$ 41'48	1°22'02
	-5097 Jul 20 j 20:36	28° $\mathring{\text{M}}$ 44'10		minimum elong	-5089 Nov 17 j 12:27	18° $\mathring{\text{A}}$ 41'48	1°21'58
	-5097 Sep 28 j 11:17	0° $\mathring{\text{A}}$		max. Earth dist.	-5089 Nov 18 j 02:54	18° $\mathring{\text{A}}$ 43'10	31.15303 AU
conjunction	-5097 Oct 31 j 09:37	1° $\mathring{\text{A}}$ 11'41	1°51'40	retrograde	-5088 Mar 01 j 21:03	21° $\mathring{\text{A}}$ 13'21	
minimum elong	-5097 Oct 31 j 09:37	1° $\mathring{\text{A}}$ 11'41	1°51'41	opposition	-5088 May 21 j 21:09	19° $\mathring{\text{A}}$ 49'19	1°25'19
max. Earth dist.	-5097 Oct 31 j 15:24	1° $\mathring{\text{A}}$ 12'14	31.22678 AU	min. Earth dist.	-5088 May 21 j 06:50	19° $\mathring{\text{A}}$ 50'18	29.15033 AU
retrograde	-5096 Feb 12 j 22:29	3° $\mathring{\text{A}}$ 41'58		direct	-5088 Aug 09 j 00:13	18° $\mathring{\text{A}}$ 26'35	
opposition	-5096 May 03 j 13:27	2° $\mathring{\text{A}}$ 18'32	1°57'37	conjunction	-5088 Nov 18 j 22:01	20° $\mathring{\text{A}}$ 53'40	1°17'42
min. Earth dist.	-5096 May 03 j 06:16	2° $\mathring{\text{A}}$ 19'01	29.22302 AU	minimum elong	-5088 Nov 18 j 22:01	20° $\mathring{\text{A}}$ 53'40	1°17'37
direct	-5096 Jul 22 j 07:07	0° $\mathring{\text{A}}$ 55'32		max. Earth dist.	-5088 Nov 19 j 12:35	20° $\mathring{\text{A}}$ 55'02	31.14630 AU
conjunction	-5096 Nov 01 j 18:54	3° $\mathring{\text{A}}$ 22'58	1°48'29	retrograde	-5087 Mar 04 j 10:38	23° $\mathring{\text{A}}$ 25'25	
minimum elong	-5096 Nov 01 j 18:55	3° $\mathring{\text{A}}$ 22'58	1°48'29	opposition	-5087 May 24 j 10:05	22° $\mathring{\text{A}}$ 01'22	1°20'38
max. Earth dist.	-5096 Nov 02 j 01:53	3° $\mathring{\text{A}}$ 23'38	31.21669 AU	min. Earth dist.	-5087 May 23 j 18:24	22° $\mathring{\text{A}}$ 02'25	29.14341 AU
retrograde	-5095 Feb 14 j 10:10	5° $\mathring{\text{A}}$ 53'23		direct	-5087 Aug 11 j 10:11	20° $\mathring{\text{A}}$ 38'41	
opposition	-5095 May 06 j 02:32	4° $\mathring{\text{A}}$ 29'50	1°54'07	conjunction	-5087 Nov 21 j 07:53	23° $\mathring{\text{A}}$ 05'46	1°13'16
min. Earth dist.	-5095 May 05 j 19:29	4° $\mathring{\text{A}}$ 30'19	29.21242 AU	minimum elong	-5087 Nov 21 j 07:54	23° $\mathring{\text{A}}$ 05'46	1°13'10
direct	-5095 Jul 24 j 18:45	3° $\mathring{\text{A}}$ 06'50		max. Earth dist.	-5087 Nov 21 j 23:30	23° $\mathring{\text{A}}$ 07'14	31.13907 AU
conjunction	-5095 Nov 04 j 04:10	5° $\mathring{\text{A}}$ 34'11	1°45'08	retrograde	-5086 Mar 06 j 23:07	25° $\mathring{\text{A}}$ 37'43	
minimum elong	-5095 Nov 04 j 04:11	5° $\mathring{\text{A}}$ 34'11	1°45'08	opposition	-5086 May 26 j 23:12	24° $\mathring{\text{A}}$ 13'37	1°15'49
max. Earth dist.	-5095 Nov 04 j 11:52	5° $\mathring{\text{A}}$ 34'55	31.20600 AU	min. Earth dist.	-5086 May 26 j 07:49	24° $\mathring{\text{A}}$ 14'40	29.13580 AU
retrograde	-5094 Feb 16 j 23:18	8° $\mathring{\text{A}}$ 04'43		direct	-5086 Aug 13 j 20:44	22° $\mathring{\text{A}}$ 50'59	
opposition	-5094 May 08 j 15:32	6° $\mathring{\text{A}}$ 41'03	1°50'28	conjunction	-5086 Nov 23 j 17:53	25° $\mathring{\text{A}}$ 18'04	1°08'43
min. Earth dist.	-5094 May 08 j 06:29	6° $\mathring{\text{A}}$ 41'40	29.20151 AU	minimum elong	-5086 Nov 23 j 17:54	25° $\mathring{\text{A}}$ 18'04	1°08'37
direct	-5094 Jul 27 j 06:13	5° $\mathring{\text{A}}$ 18'03		max. Earth dist.	-5086 Nov 24 j 09:59	25° $\mathring{\text{A}}$ 19'35	31.13109 AU
conjunction	-5094 Nov 06 j 13:21	7° $\mathring{\text{A}}$ 45'19	1°41'38	retrograde	-5085 Mar 09 j 12:59	27° $\mathring{\text{A}}$ 50'11	
minimum elong	-5094 Nov 06 j 13:21	7° $\mathring{\text{A}}$ 45'19	1°41'37	opposition	-5085 May 29 j 12:10	26° $\mathring{\text{A}}$ 26'02	1°10'54
max. Earth dist.	-5094 Nov 06 j 21:52	7° $\mathring{\text{A}}$ 46'07	31.19512 AU	min. Earth dist.	-5085 May 28 j 19:16	26° $\mathring{\text{A}}$ 27'11	29.12712 AU
retrograde	-5093 Feb 19 j 10:41	10° $\mathring{\text{A}}$ 16'00		direct	-5085 Aug 16 j 07:18	25° $\mathring{\text{A}}$ 03'26	
opposition	-5093 May 11 j 04:37	8° $\mathring{\text{A}}$ 52'13	1°46'39	conjunction	-5085 Nov 26 j 04:01	27° $\mathring{\text{A}}$ 30'31	1°04'04
min. Earth dist.	-5093 May 10 j 19:37	8° $\mathring{\text{A}}$ 52'50	29.19085 AU	minimum elong	-5085 Nov 26 j 04:02	27° $\mathring{\text{A}}$ 30'31	1°03'57
direct	-5093 Jul 29 j 17:14	7° $\mathring{\text{A}}$ 29'13		max. Earth dist.	-5085 Nov 26 j 20:10	27° $\mathring{\text{A}}$ 32'02	31.12172 AU
conjunction	-5093 Nov 08 j 22:44	9° $\mathring{\text{A}}$ 56'25	1°38'00		-5084 Feb 27 j 00:01	0° $\mathring{\text{M}}$	
minimum elong	-5093 Nov 08 j 22:45	9° $\mathring{\text{A}}$ 56'25	1°37'58	retrograde	-5084 Mar 11 j 01:38	0° $\mathring{\text{M}}$ 02'47	
max. Earth dist.	-5093 Nov 09 j 08:56	9° $\mathring{\text{A}}$ 57'23	31.18486 AU		-5084 Mar 24 j 05:47	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$	
retrograde	-5092 Feb 21 j 22:22	12° $\mathring{\text{A}}$ 27'13		min. Earth dist.	-5084 May 30 j 08:56	28° $\mathring{\text{A}}$ 39'40	29.11710 AU
opposition	-5092 May 12 j 17:19	11° $\mathring{\text{A}}$ 03'22	1°42'41	opposition	-5084 May 31 j 01:08	28° $\mathring{\text{A}}$ 38'34	1°05'53
min. Earth dist.	-5092 May 12 j 06:21	11° $\mathring{\text{A}}$ 04'07	29.18092 AU	direct	-5084 Aug 17 j 18:16	27° $\mathring{\text{A}}$ 15'58	
direct	-5092 Jul 31 j 06:08	9° $\mathring{\text{A}}$ 40'23		conjunction	-5084 Nov 27 j 14:19	29° $\mathring{\text{A}}$ 43'01	0°59'19
conjunction	-5092 Nov 10 j 08:01	12° $\mathring{\text{A}}$ 07'33	1°34'13	minimum elong	-5084 Nov 27 j 14:19	29° $\mathring{\text{A}}$ 43'01	0°59'12
minimum elong	-5092 Nov 10 j 08:01	12° $\mathring{\text{A}}$ 07'33	1°34'10	max. Earth dist.	-5084 Nov 28 j 07:36	29° $\mathring{\text{A}}$ 44'39	31.11116 AU
max. Earth dist.	-5092 Nov 10 j 18:26	12° $\mathring{\text{A}}$ 08'32	31.17548 AU		-5084 Dec 05 j 01:51	0° $\mathring{\text{M}}$	
retrograde	-5091 Feb 23 j 11:06	14° $\mathring{\text{A}}$ 38'31		retrograde	-5083 Mar 13 j 15:11	2° $\mathring{\text{M}}$ 15'24	

Attention, astronomical year style is used: The year -5083 in astronomical counting style is the year 5084 BCE in historical counting style.

opposition	-5083 Jun 02 j 14:03	0°M51'06	1°00'45	conjunction	-5076 Dec 15 j 01:31	17°M22'33	0°18'48
min. Earth dist.	-5083 Jun 01 j 20:29	0°M52'18	29.10583 AU	minimum elong	-5076 Dec 15 j 01:31	17°M22'33	0°18'36
	-5083 Jul 06 j 05:45	30°R2		max. Earth dist.	-5076 Dec 15 j 23:50	17°M24'39	31.02904 AU
direct	-5083 Aug 20 j 07:40	29°A28'29		retrograde	-5075 Mar 31 j 18:24	19°M55'59	
	-5083 Oct 02 j 15:27	0°M		opposition	-5075 Jun 20 j 20:03	18°M31'08	0°17'10
				min. Earth dist.	-5075 Jun 19 j 22:11	18°M32'38	29.02554 AU
conjunction	-5083 Nov 30 j 00:20	1°M55'30	0°54'29	direct	-5075 Sep 06 j 22:04	17°M08'29	
minimum elong	-5083 Nov 30 j 00:20	1°M55'30	0°54'21				
max. Earth dist.	-5083 Nov 30 j 17:16	1°M57'06	31.09951 AU	conjunction	-5075 Dec 17 j 12:27	19°M35'31	0°13'30
retrograde	-5082 Mar 16 j 04:33	4°M28'01		minimum elong	-5075 Dec 17 j 12:27	19°M35'31	0°13'18
min. Earth dist.	-5082 Jun 04 j 09:42	3°M04'47	29.09389 AU	behind sun begin	-5075 Dec 17 j 08:41	19°M35'10	
opposition	-5082 Jun 05 j 03:06	3°M03'36	0°55'33	behind sun end	-5075 Dec 17 j 16:13	19°M35'51	
direct	-5082 Aug 22 j 18:43	1°M40'57		max. Earth dist.	-5075 Dec 18 j 12:01	19°M37'44	31.02143 AU
				retrograde	-5074 Apr 03 j 08:43	22°M09'06	
conjunction	-5082 Dec 02 j 10:42	4°M07'55	0°49'34	min. Earth dist.	-5074 Jun 22 j 09:41	20°M45'48	29.01768 AU
minimum elong	-5082 Dec 02 j 10:42	4°M07'55	0°49'26	opposition	-5074 Jun 23 j 08:42	20°M44'14	0°11'29
max. Earth dist.	-5082 Dec 03 j 05:19	4°M09'40	31.08743 AU	direct	-5074 Sep 09 j 10:37	19°M21'37	
retrograde	-5081 Mar 18 j 15:08	6°M40'32					
opposition	-5081 Jun 07 j 15:47	5°M16'00	0°50'16	conjunction	-5074 Dec 19 j 23:34	21°M48'42	0°08'12
min. Earth dist.	-5081 Jun 06 j 21:20	5°M17'16	29.08174 AU	minimum elong	-5074 Dec 19 j 23:34	21°M48'42	0°08'00
direct	-5081 Aug 25 j 07:13	3°M53'19		behind sun begin	-5074 Dec 19 j 17:47	21°M48'11	
				behind sun end	-5074 Dec 20 j 05:21	21°M49'13	
conjunction	-5081 Dec 04 j 20:55	6°M20'15	0°44'36	max. Earth dist.	-5074 Dec 20 j 22:24	21°M50'51	31.01326 AU
minimum elong	-5081 Dec 04 j 20:55	6°M20'15	0°44'26	retrograde	-5073 Apr 05 j 22:54	24°M22'27	
max. Earth dist.	-5081 Dec 05 j 15:14	6°M21'59	31.07552 AU	opposition	-5073 Jun 25 j 21:20	22°M57'33	0°05'47
retrograde	-5080 Mar 20 j 03:52	8°M52'59		min. Earth dist.	-5073 Jun 24 j 22:59	22°M59'05	29.00918 AU
min. Earth dist.	-5080 Jun 08 j 09:25	7°M29'40	29.07017 AU	direct	-5073 Sep 11 j 21:00	21°M34'56	
opposition	-5080 Jun 09 j 04:34	7°M28'21	0°44'54				
direct	-5080 Aug 26 j 17:56	6°M05'39		conjunction	-5073 Dec 22 j 10:59	24°M02'05	0°02'53
				minimum elong	-5073 Dec 22 j 10:59	24°M02'05	0°02'40
conjunction	-5080 Dec 06 j 07:13	8°M32'33	0°39'33	behind sun begin	-5073 Dec 22 j 04:33	24°M01'30	
minimum elong	-5080 Dec 06 j 07:13	8°M32'33	0°39'23	behind sun end	-5073 Dec 22 j 17:26	24°M02'40	
max. Earth dist.	-5080 Dec 07 j 03:21	8°M34'27	31.06427 AU	max. Earth dist.	-5073 Dec 23 j 10:55	24°M04'21	31.00418 AU
retrograde	-5079 Mar 22 j 14:58	11°M05'24		retrograde	-5072 Apr 07 j 11:17	26°M35'57	
opposition	-5079 Jun 11 j 17:20	9°M40'41	0°39'28	min. Earth dist.	-5072 Jun 26 j 11:05	25°M12'36	28.99945 AU
min. Earth dist.	-5079 Jun 10 j 21:41	9°M42'02	29.05937 AU	opposition	-5072 Jun 27 j 09:58	25°M11'01	0°00'04
direct	-5079 Aug 29 j 05:24	8°M17'59		desc. node	-5072 Jul 02 j 02:55	25°M03'16	
				direct	-5072 Sep 13 j 09:30	23°M48'25	
conjunction	-5079 Dec 08 j 17:36	10°M44'52	0°34'26				
minimum elong	-5079 Dec 08 j 17:37	10°M44'52	0°34'16	conjunction	-5072 Dec 23 j 22:11	26°M15'36	0°-2'-35
max. Earth dist.	-5079 Dec 09 j 13:55	10°M46'47	31.05415 AU	minimum elong	-5072 Dec 23 j 22:12	26°M15'36	0°02'49
retrograde	-5078 Mar 25 j 03:50	13°M17'51		behind sun begin	-5072 Dec 23 j 15:46	26°M15'01	
min. Earth dist.	-5078 Jun 13 j 08:57	11°M54'31	29.04981 AU	behind sun end	-5072 Dec 24 j 04:39	26°M16'11	
opposition	-5078 Jun 14 j 06:00	11°M53'05	0°33'58	max. Earth dist.	-5072 Dec 24 j 21:11	26°M17'46	30.99390 AU
direct	-5078 Aug 31 j 15:32	10°M30'22		retrograde	-5071 Apr 10 j 01:36	28°M49'35	
				opposition	-5071 Jun 29 j 22:41	27°M24'36	0°-5'-37
conjunction	-5078 Dec 11 j 04:07	12°M57'16	0°29'16	min. Earth dist.	-5071 Jun 28 j 23:47	27°M26'10	28.98862 AU
minimum elong	-5078 Dec 11 j 04:07	12°M57'16	0°29'05	direct	-5071 Sep 15 j 20:44	26°M01'58	
max. Earth dist.	-5078 Dec 12 j 01:31	12°M59'17	31.04502 AU				
	-5077 Feb 11 j 23:12	15°M		conjunction	-5071 Dec 26 j 09:45	28°M29'11	0°-7'-54
retrograde	-5077 Mar 27 j 15:26	15°M30'24		minimum elong	-5071 Dec 26 j 09:45	28°M29'11	0°08'09
	-5077 May 11 j 19:22	15°RM		behind sun begin	-5071 Dec 26 j 04:00	28°M28'40	
opposition	-5077 Jun 16 j 18:46	14°M05'35	0°28'24	behind sun end	-5071 Dec 26 j 15:30	28°M29'42	
min. Earth dist.	-5077 Jun 15 j 21:53	14°M07'01	29.04113 AU	max. Earth dist.	-5071 Dec 27 j 09:47	28°M31'27	30.98250 AU
direct	-5077 Sep 03 j 01:37	12°M42'53			-5070 Feb 07 j 05:10	0°A	
	-5077 Dec 09 j 07:05	15°M		retrograde	-5070 Apr 12 j 13:25	1°A03'16	
					-5070 Jun 19 j 03:21	30°RM	
conjunction	-5077 Dec 13 j 14:48	15°M09'48	0°24'03	opposition	-5070 Jul 02 j 11:13	29°M38'12	0°-11'-19
minimum elong	-5077 Dec 13 j 14:48	15°M09'48	0°23'52	min. Earth dist.	-5070 Jul 01 j 12:33	29°M39'45	28.97680 AU
max. Earth dist.	-5077 Dec 14 j 12:54	15°M11'54	31.03683 AU	direct	-5070 Sep 18 j 08:43	28°M15'31	
retrograde	-5076 Mar 29 j 05:06	17°M43'05			-5070 Dec 09 j 18:47	0°A	
min. Earth dist.	-5076 Jun 17 j 08:47	16°M19'47	29.03317 AU				
opposition	-5076 Jun 18 j 07:15	16°M18'15	0°22'48	conjunction	-5070 Dec 28 j 21:14	0°A42'45	0°-13'-12
	-5076 Aug 19 j 08:20	15°RM		minimum elong	-5070 Dec 28 j 21:14	0°A42'45	0°13'27
direct	-5076 Sep 04 j 11:46	14°M55'34		behind sun begin	-5070 Dec 28 j 17:35	0°A42'25	
	-5076 Sep 20 j 12:18	15°M		behind sun end	-5070 Dec 29 j 00:54	0°A43'05	
				max. Earth dist.	-5070 Dec 29 j 20:51	0°A44'58	30.97053 AU

Attention, astronomical year style is used: The year -5069 in astronomical counting style is the year 5070 BCE in historical counting style.

retrograde	-5069 Apr 15 j 02:09	3°♂16'54		direct	-5061 Oct 08 j 12:12	18°♂18'52	
opposition	-5069 Jul 04 j 23:38	1°♂51'46	0°-17'00				
min. Earth dist.	-5069 Jul 04 j 00:15	1°♂53'23	28.96472 AU	conjunction	-5060 Jan 18 j 08:54	20°♂46'43	0°-59'-21
direct	-5069 Sep 20 j 19:36	0°♂29'01		minimum elong	-5060 Jan 18 j 08:53	20°♂46'43	0°59'39
				max. Earth dist.	-5060 Jan 19 j 10:42	20°♂49'09	30.89622 AU
conjunction	-5069 Dec 31 j 08:48	2°♂56'17	0°-18'-30	retrograde	-5060 May 05 j 01:45	23°♂21'35	
minimum elong	-5069 Dec 31 j 08:47	2°♂56'17	0°18'46	opposition	-5060 Jul 24 j 13:00	21°♂56'12	-1°-6'-7
max. Earth dist.	-5068 Jan 01 j 08:59	2°♂58'34	30.95835 AU	min. Earth dist.	-5060 Jul 23 j 12:28	21°♂57'55	28.89371 AU
retrograde	-5068 Apr 16 j 13:03	5°♂30'31		direct	-5060 Oct 09 j 23:20	20°♂33'14	
opposition	-5068 Jul 06 j 11:56	4°♂05'17	0°-22'-40				
min. Earth dist.	-5068 Jul 05 j 13:07	4°♂06'52	28.95285 AU	conjunction	-5059 Jan 19 j 21:38	23°♂01'10	-1°-4'-9
direct	-5068 Sep 22 j 05:53	2°♂42'30		minimum elong	-5059 Jan 19 j 21:38	23°♂01'10	1°04'26
				max. Earth dist.	-5059 Jan 20 j 23:25	23°♂03'36	30.88957 AU
conjunction	-5067 Jan 01 j 20:24	5°♂09'47	0°-23'-46	retrograde	-5059 May 07 j 13:54	25°♂36'05	
minimum elong	-5067 Jan 01 j 20:24	5°♂09'47	0°24'02	min. Earth dist.	-5059 Jul 26 j 01:47	24°♂12'19	28.88668 AU
max. Earth dist.	-5067 Jan 02 j 21:06	5°♂12'06	30.94695 AU	opposition	-5059 Jul 27 j 01:09	24°♂10'41	-1°-11'-12
retrograde	-5067 Apr 19 j 02:32	7°♂44'05		direct	-5059 Oct 12 j 10:12	22°♂47'40	
min. Earth dist.	-5067 Jul 07 j 23:54	6°♂20'29	28.94197 AU				
opposition	-5067 Jul 09 j 00:08	6°♂18'48	0°-28'-17	conjunction	-5058 Jan 22 j 10:27	25°♂15'40	-1°-8'-51
direct	-5067 Sep 24 j 16:04	4°♂55'56		minimum elong	-5058 Jan 22 j 10:27	25°♂15'40	1°09'09
				max. Earth dist.	-5058 Jan 23 j 11:52	25°♂18'04	30.88214 AU
conjunction	-5066 Jan 04 j 08:00	7°♂23'17	0°-29'00	retrograde	-5058 May 10 j 03:46	27°♂50'36	
minimum elong	-5066 Jan 04 j 07:59	7°♂23'17	0°29'17	opposition	-5058 Jul 29 j 13:08	26°♂25'10	-1°-16'-10
max. Earth dist.	-5066 Jan 05 j 08:44	7°♂25'37	30.93656 AU	min. Earth dist.	-5058 Jul 28 j 13:09	26°♂26'51	28.87882 AU
retrograde	-5066 Apr 21 j 14:54	9°♂57'40		direct	-5058 Oct 14 j 21:27	25°♂02'04	
opposition	-5066 Jul 11 j 12:28	8°♂32'20	0°-33'-52				
min. Earth dist.	-5066 Jul 10 j 12:53	8°♂33'58	28.93231 AU	conjunction	-5057 Jan 24 j 23:22	27°♂30'09	-1°-13'-28
direct	-5066 Sep 27 j 02:36	7°♂09'26		minimum elong	-5057 Jan 24 j 23:21	27°♂30'09	1°13'45
				max. Earth dist.	-5057 Jan 26 j 00:01	27°♂32'29	30.87385 AU
conjunction	-5065 Jan 06 j 19:55	9°♂36'50	0°-34'-12		-5057 Apr 24 j 23:57	0°♂	
minimum elong	-5065 Jan 06 j 19:55	9°♂36'50	0°34'28	retrograde	-5057 May 12 j 15:14	0°♂05'06	
max. Earth dist.	-5065 Jan 07 j 21:51	9°♂39'17	30.92757 AU		-5057 May 30 j 11:25	30°♂	
retrograde	-5065 Apr 24 j 04:34	12°♂11'18		min. Earth dist.	-5057 Jul 31 j 02:25	28°♂41'12	28.87044 AU
min. Earth dist.	-5065 Jul 12 j 23:39	10°♂47'39	28.92398 AU	opposition	-5057 Aug 01 j 01:01	28°♂39'37	-1°-21'-2
opposition	-5065 Jul 14 j 00:25	10°♂45'55	0°-39'-24	direct	-5057 Oct 17 j 08:02	27°♂16'27	
direct	-5065 Sep 29 j 14:33	9°♂23'00					
				conjunction	-5056 Jan 27 j 12:22	29°♂44'36	-1°-17'-57
conjunction	-5064 Jan 09 j 07:46	11°♂50'29	0°-39'-22	minimum elong	-5056 Jan 27 j 12:22	29°♂44'36	1°18'15
minimum elong	-5064 Jan 09 j 07:45	11°♂50'29	0°39'38	max. Earth dist.	-5056 Jan 28 j 13:35	29°♂46'58	30.86544 AU
max. Earth dist.	-5064 Jan 10 j 09:04	11°♂52'52	30.91985 AU		-5056 Feb 03 j 08:03	0°♂	
retrograde	-5064 Apr 25 j 18:26	14°♂25'02		retrograde	-5056 May 14 j 04:10	2°♂19'32	
opposition	-5064 Jul 15 j 12:39	12°♂59'39	0°-44'-53	opposition	-5056 Aug 02 j 12:46	0°♂54'00	-1°-25'-46
min. Earth dist.	-5064 Jul 14 j 12:21	13°♂01'20	28.91697 AU	min. Earth dist.	-5056 Aug 01 j 13:29	0°♂55'38	28.86215 AU
direct	-5064 Oct 01 j 00:21	11°♂36'43			-5056 Sep 06 j 09:40	30°♂	
				direct	-5056 Oct 18 j 20:02	29°♂30'45	
conjunction	-5063 Jan 10 j 19:44	14°♂04'16	0°-44'-27		-5056 Nov 29 j 05:35	0°♂	
minimum elong	-5063 Jan 10 j 19:44	14°♂04'16	0°44'44				
max. Earth dist.	-5063 Jan 11 j 22:26	14°♂06'47	30.91331 AU	conjunction	-5055 Jan 29 j 01:06	1°♂58'58	-1°-22'-19
retrograde	-5063 Apr 28 j 07:47	16°♂38'55		minimum elong	-5055 Jan 29 j 01:05	1°♂58'58	1°22'36
min. Earth dist.	-5063 Jul 16 j 23:49	15°♂15'15	28.91086 AU	max. Earth dist.	-5055 Jan 30 j 01:19	2°♂01'15	30.85737 AU
opposition	-5063 Jul 18 j 00:46	15°♂13'31	0°-50'-18	retrograde	-5055 May 16 j 17:29	4°♂33'55	
direct	-5063 Oct 03 j 12:50	13°♂50'35		min. Earth dist.	-5055 Aug 04 j 02:13	3°♂09'56	28.85463 AU
				opposition	-5055 Aug 05 j 00:37	3°♂08'21	-1°-30'-23
conjunction	-5062 Jan 13 j 07:53	16°♂18'15	0°-49'-30	direct	-5055 Oct 21 j 06:00	1°♂45'02	
minimum elong	-5062 Jan 13 j 07:52	16°♂18'15	0°49'47				
max. Earth dist.	-5062 Jan 14 j 09:40	16°♂20'40	30.90758 AU	conjunction	-5054 Jan 31 j 14:15	4°♂13'20	-1°-26'-34
retrograde	-5062 Apr 30 j 23:26	18°♂52'58		minimum elong	-5054 Jan 31 j 14:15	4°♂13'20	1°26'52
opposition	-5062 Jul 20 j 12:51	17°♂27'35	0°-55'-39	max. Earth dist.	-5054 Feb 01 j 15:29	4°♂15'42	30.85026 AU
min. Earth dist.	-5062 Jul 19 j 12:03	17°♂29'18	28.90542 AU	retrograde	-5054 May 19 j 06:38	6°♂48'17	
direct	-5062 Oct 06 j 00:13	16°♂04'38		opposition	-5054 Aug 07 j 12:09	5°♂22'42	-1°-34'-51
				min. Earth dist.	-5054 Aug 06 j 13:22	5°♂24'18	28.84815 AU
conjunction	-5061 Jan 15 j 20:23	18°♂32'24	0°-54'-28	direct	-5054 Oct 23 j 18:43	3°♂59'19	
minimum elong	-5061 Jan 15 j 20:23	18°♂32'24	0°54'45				
max. Earth dist.	-5061 Jan 16 j 23:05	18°♂34'55	30.90205 AU	conjunction	-5053 Feb 03 j 03:21	6°♂27'44	-1°-30'-41
retrograde	-5061 May 03 j 11:37	21°♂07'12		minimum elong	-5053 Feb 03 j 03:20	6°♂27'43	1°30'58
min. Earth dist.	-5061 Jul 22 j 00:39	19°♂43'31	28.89981 AU	max. Earth dist.	-5053 Feb 04 j 03:22	6°♂29'59	30.84444 AU
opposition	-5061 Jul 23 j 00:57	19°♂41'49	-1°00'-56	retrograde	-5053 May 21 j 21:55	9°♂02'40	

Attention, astronomical year style is used: The year -5053 in astronomical counting style is the year 5054 BCE in historical counting style.

opposition	-5053 Aug 09 j 23:47	7° $\overline{3}$ 37'06	-1°-39'-11	conjunction	-5044 Feb 24 j 06:54	26° $\overline{3}$ 43'34	-2°00'-56
min. Earth dist.	-5053 Aug 09 j 01:11	7° $\overline{3}$ 38'41	28.84316 AU	minimum elong	-5044 Feb 24 j 06:54	26° $\overline{3}$ 43'34	2°01'13
direct	-5053 Oct 26 j 06:15	6° $\overline{3}$ 13'39		max. Earth dist.	-5044 Feb 25 j 02:07	26° $\overline{3}$ 45'22	30.82237 AU
				retrograde	-5044 Jun 10 j 20:31	29° $\overline{3}$ 18'23	
conjunction	-5052 Feb 05 j 16:31	8° $\overline{3}$ 42'12	-1°-34'-40	opposition	-5044 Aug 29 j 07:07	27° $\overline{3}$ 53'04	-2°-10'-43
minimum elong	-5052 Feb 05 j 16:31	8° $\overline{3}$ 42'12	1°34'58	min. Earth dist.	-5044 Aug 28 j 13:34	27° $\overline{3}$ 54'19	28.82193 AU
max. Earth dist.	-5052 Feb 06 j 17:30	8° $\overline{3}$ 44'32	30.84000 AU	direct	-5044 Nov 14 j 12:33	26° $\overline{3}$ 29'16	
retrograde	-5052 May 23 j 09:58	11° $\overline{3}$ 17'09					
opposition	-5052 Aug 11 j 11:21	9° $\overline{3}$ 51'36	-1°-43'-22	conjunction	-5043 Feb 25 j 21:08	28° $\overline{3}$ 58'51	-2°-3'-26
min. Earth dist.	-5052 Aug 10 j 13:05	9° $\overline{3}$ 53'10	28.83948 AU	minimum elong	-5043 Feb 25 j 21:08	28° $\overline{3}$ 58'51	2°03'42
direct	-5052 Oct 27 j 18:13	8° $\overline{3}$ 28'09		max. Earth dist.	-5043 Feb 26 j 16:44	29° $\overline{3}$ 00'41	30.81844 AU
					-5043 Mar 25 j 19:14	0° \approx	
conjunction	-5051 Feb 07 j 05:48	10° $\overline{3}$ 56'48	-1°-38'-31	retrograde	-5043 Jun 13 j 08:31	1° \approx 33'34	
minimum elong	-5051 Feb 07 j 05:47	10° $\overline{3}$ 56'48	1°38'48	opposition	-5043 Aug 31 j 18:17	0° \approx 08'15	-2°-13'-18
max. Earth dist.	-5051 Feb 08 j 05:56	10° $\overline{3}$ 59'04	30.83710 AU	min. Earth dist.	-5043 Aug 31 j 01:35	0° \approx 09'26	28.81820 AU
retrograde	-5051 May 26 j 01:00	13° $\overline{3}$ 31'47			-5043 Sep 05 j 14:38	30° \overline{R} $\overline{3}$	
opposition	-5051 Aug 13 j 22:51	12° $\overline{3}$ 06'16	-1°-47'-24	direct	-5043 Nov 17 j 00:47	28° $\overline{3}$ 44'20	
min. Earth dist.	-5051 Aug 13 j 00:16	12° $\overline{3}$ 07'51	28.83729 AU		-5042 Jan 25 j 03:11	0° \approx	
direct	-5051 Oct 30 j 05:31	10° $\overline{3}$ 42'48					
				conjunction	-5042 Feb 28 j 11:18	1° \approx 14'00	-2°-5'-45
conjunction	-5050 Feb 09 j 19:15	13° $\overline{3}$ 11'35	-1°-42'-12	minimum elong	-5042 Feb 28 j 11:17	1° \approx 14'00	2°06'01
minimum elong	-5050 Feb 09 j 19:15	13° $\overline{3}$ 11'35	1°42'30	max. Earth dist.	-5042 Mar 01 j 05:28	1° \approx 15'42	30.81506 AU
max. Earth dist.	-5050 Feb 10 j 19:35	13° $\overline{3}$ 13'53	30.83530 AU	retrograde	-5042 Jun 15 j 23:29	3° \approx 48'38	
retrograde	-5050 May 28 j 14:06	15° $\overline{3}$ 46'36		opposition	-5042 Sep 03 j 05:25	2° \approx 23'17	-2°-15'-40
opposition	-5050 Aug 16 j 10:26	14° $\overline{3}$ 21'08	-1°-51'-15	min. Earth dist.	-5042 Sep 02 j 12:48	2° \approx 24'28	28.81526 AU
min. Earth dist.	-5050 Aug 15 j 13:03	14° $\overline{3}$ 22'38	28.83595 AU	direct	-5042 Nov 19 j 13:26	0° \approx 59'17	
direct	-5050 Nov 01 j 16:31	12° $\overline{3}$ 57'40					
				conjunction	-5041 Mar 03 j 01:33	3° \approx 29'03	-2°-7'-52
conjunction	-5049 Feb 12 j 08:57	15° $\overline{3}$ 26'36	-1°-45'-45	minimum elong	-5041 Mar 03 j 01:33	3° \approx 29'03	2°08'07
minimum elong	-5049 Feb 12 j 08:57	15° $\overline{3}$ 26'36	1°46'02	max. Earth dist.	-5041 Mar 03 j 19:43	3° \approx 30'45	30.81243 AU
max. Earth dist.	-5049 Feb 13 j 08:44	15° $\overline{3}$ 28'50	30.83426 AU	retrograde	-5041 Jun 18 j 11:52	6° \approx 03'34	
retrograde	-5049 May 31 j 04:13	18° $\overline{3}$ 01'37		opposition	-5041 Sep 05 j 16:30	4° \approx 38'14	-2°-17'-49
opposition	-5049 Aug 18 j 21:46	16° $\overline{3}$ 36'13	-1°-54'-57	min. Earth dist.	-5041 Sep 05 j 01:08	4° \approx 39'20	28.81329 AU
min. Earth dist.	-5049 Aug 17 j 23:58	16° $\overline{3}$ 37'45	28.83506 AU	direct	-5041 Nov 22 j 01:37	3° \approx 14'10	
direct	-5049 Nov 04 j 03:45	15° $\overline{3}$ 12'44					
				conjunction	-5040 Mar 04 j 15:45	5° \approx 44'01	-2°-9'-47
conjunction	-5048 Feb 14 j 22:43	17° $\overline{3}$ 41'49	-1°-49'-7	minimum elong	-5040 Mar 04 j 15:45	5° \approx 44'01	2°10'03
minimum elong	-5048 Feb 14 j 22:43	17° $\overline{3}$ 41'49	1°49'25	max. Earth dist.	-5040 Mar 05 j 09:10	5° \approx 45'39	30.81119 AU
max. Earth dist.	-5048 Feb 15 j 21:35	17° $\overline{3}$ 43'57	30.83321 AU	retrograde	-5040 Jun 20 j 01:42	8° \approx 18'27	
retrograde	-5048 Jun 01 j 15:47	20° $\overline{3}$ 16'51		min. Earth dist.	-5040 Sep 06 j 11:34	6° \approx 54'17	28.81276 AU
opposition	-5048 Aug 20 j 09:24	18° $\overline{3}$ 51'30	-1°-58'-29	opposition	-5040 Sep 07 j 03:30	6° \approx 53'09	-2°-19'-46
min. Earth dist.	-5048 Aug 19 j 13:15	18° $\overline{3}$ 52'55	28.83397 AU	direct	-5040 Nov 23 j 13:55	5° \approx 29'01	
direct	-5048 Nov 05 j 14:01	17° $\overline{3}$ 28'00					
				conjunction	-5039 Mar 07 j 05:54	7° \approx 58'59	-2°-11'-31
conjunction	-5047 Feb 16 j 12:38	19° $\overline{3}$ 57'12	-1°-52'-20	minimum elong	-5039 Mar 07 j 05:54	7° \approx 58'59	2°11'45
minimum elong	-5047 Feb 16 j 12:37	19° $\overline{3}$ 57'12	1°52'36	max. Earth dist.	-5039 Mar 07 j 22:37	8° \approx 00'32	30.81126 AU
max. Earth dist.	-5047 Feb 17 j 11:26	19° $\overline{3}$ 59'20	30.83181 AU	retrograde	-5039 Jun 22 j 13:41	10° \approx 33'20	
retrograde	-5047 Jun 04 j 05:14	22° $\overline{3}$ 32'13		opposition	-5039 Sep 09 j 14:38	9° \approx 08'04	-2°-21'-30
opposition	-5047 Aug 22 j 20:53	21° $\overline{3}$ 06'54	-2°-1'-49	min. Earth dist.	-5039 Sep 09 j 00:11	9° \approx 09'06	28.81358 AU
min. Earth dist.	-5047 Aug 22 j 00:37	21° $\overline{3}$ 08'20	28.83214 AU	direct	-5039 Nov 26 j 00:25	7° \approx 43'54	
direct	-5047 Nov 08 j 01:34	19° $\overline{3}$ 43'21					
				conjunction	-5038 Mar 09 j 20:21	10° \approx 13'59	-2°-13'-2
conjunction	-5046 Feb 19 j 02:41	22° $\overline{3}$ 12'41	-1°-55'-23	minimum elong	-5038 Mar 09 j 20:21	10° \approx 13'59	2°13'17
minimum elong	-5046 Feb 19 j 02:41	22° $\overline{3}$ 12'41	1°55'40	max. Earth dist.	-5038 Mar 10 j 13:00	10° \approx 15'33	30.81275 AU
max. Earth dist.	-5046 Feb 19 j 23:40	22° $\overline{3}$ 14'39	30.82944 AU	retrograde	-5038 Jun 25 j 03:19	12° \approx 48'16	
retrograde	-5046 Jun 06 j 18:06	24° $\overline{3}$ 47'39		min. Earth dist.	-5038 Sep 11 j 10:45	11° \approx 24'08	28.81556 AU
opposition	-5046 Aug 25 j 08:23	23° $\overline{3}$ 22'22	-2°-4'-59	opposition	-5038 Sep 12 j 01:26	11° \approx 23'05	-2°-23'-1
min. Earth dist.	-5046 Aug 24 j 13:44	23° $\overline{3}$ 23'41	28.82941 AU	direct	-5038 Nov 28 j 12:03	9° \approx 58'53	
direct	-5046 Nov 10 j 11:22	21° $\overline{3}$ 58'44					
				conjunction	-5037 Mar 12 j 10:46	12° \approx 29'07	-2°-14'-21
conjunction	-5045 Feb 21 j 16:58	24° $\overline{3}$ 28'10	-1°-58'-15	minimum elong	-5037 Mar 12 j 10:46	12° \approx 29'07	2°14'35
minimum elong	-5045 Feb 21 j 16:58	24° $\overline{3}$ 28'10	1°58'31	max. Earth dist.	-5037 Mar 13 j 01:54	12° \approx 30'32	30.81515 AU
max. Earth dist.	-5045 Feb 22 j 14:04	24° $\overline{3}$ 30'08	30.82622 AU		-5037 Jun 13 j 12:25	15° \approx	
retrograde	-5045 Jun 09 j 06:29	27° $\overline{3}$ 03'04		retrograde	-5037 Jun 27 j 15:26	15° \approx 03'21	
opposition	-5045 Aug 27 j 19:45	25° $\overline{3}$ 37'46	-2°-7'-57		-5037 Jul 11 j 19:41	15° \overline{R} \approx	
min. Earth dist.	-5045 Aug 27 j 01:24	25° $\overline{3}$ 39'04	28.82579 AU	opposition	-5037 Sep 14 j 12:31	13° \approx 38'14	-2°-24'-19
direct	-5045 Nov 13 j 00:44	24° $\overline{3}$ 14'04		min. Earth dist.	-5037 Sep 13 j 23:20	13° \approx 39'10	28.81837 AU

Attention, astronomical year style is used: The year -5037 in astronomical counting style is the year 5038 BCE in historical counting style.

direct	-5037 Nov 30 j 21:41	12° \approx 14'01		retrograde	-5029 Jul 15 j 23:15	3° \approx 05'24	
				opposition	-5029 Oct 02 j 03:00	1° \approx 40'39	-2°-26'-39
conjunction	-5036 Mar 14 j 01:16	14° \approx 44'23	-2°-15'-28	min. Earth dist.	-5029 Oct 01 j 20:32	1° \approx 41'07	28.82888 AU
minimum elong	-5036 Mar 14 j 01:16	14° \approx 44'23	2°15'42	direct	-5029 Dec 19 j 00:39	0° \approx 15'56	
max. Earth dist.	-5036 Mar 14 j 16:36	14° \approx 45'49	30.81809 AU				
	-5036 Mar 21 j 00:19	15° \approx		conjunction	-5028 Apr 01 j 22:50	2° \approx 47'06	-2°-16'-49
retrograde	-5036 Jun 29 j 03:25	17° \approx 18'33		minimum elong	-5028 Apr 01 j 22:51	2° \approx 47'06	2°16'59
opposition	-5036 Sep 15 j 23:26	15° \approx 53'32	-2°-25'-23	max. Earth dist.	-5028 Apr 02 j 04:50	2° \approx 47'39	30.82836 AU
min. Earth dist.	-5036 Sep 15 j 10:39	15° \approx 54'27	28.82127 AU	retrograde	-5028 Jul 17 j 09:55	5° \approx 20'13	
	-5036 Oct 19 j 22:18	15° \approx		opposition	-5028 Oct 03 j 13:40	3° \approx 55'30	-2°-25'-56
direct	-5036 Dec 02 j 10:22	14° \approx 29'18		min. Earth dist.	-5028 Oct 03 j 08:33	3° \approx 55'52	28.83171 AU
	-5035 Jan 14 j 05:51	15° \approx		direct	-5028 Dec 20 j 11:03	2° \approx 30'43	
conjunction	-5035 Mar 16 j 15:52	16° \approx 59'49	-2°-16'-22	conjunction	-5027 Apr 04 j 13:31	5° \approx 01'57	-2°-16'-3
minimum elong	-5035 Mar 16 j 15:52	16° \approx 59'49	2°16'35	minimum elong	-5027 Apr 04 j 13:32	5° \approx 01'57	2°16'12
max. Earth dist.	-5035 Mar 17 j 04:57	17° \approx 01'02	30.82088 AU	max. Earth dist.	-5027 Apr 04 j 19:44	5° \approx 02'32	30.83195 AU
retrograde	-5035 Jul 01 j 17:04	19° \approx 33'55		retrograde	-5027 Jul 19 j 20:56	7° \approx 34'55	
opposition	-5035 Sep 18 j 10:21	18° \approx 08'58	-2°-26'-14	opposition	-5027 Oct 06 j 00:06	6° \approx 10'15	-2°-25'00
min. Earth dist.	-5035 Sep 17 j 22:43	18° \approx 09'47	28.82389 AU	min. Earth dist.	-5027 Oct 05 j 19:09	6° \approx 10'37	28.83597 AU
direct	-5035 Dec 04 j 21:24	16° \approx 44'41		direct	-5027 Dec 22 j 23:38	4° \approx 45'26	
conjunction	-5034 Mar 19 j 06:48	19° \approx 15'20	-2°-17'-3	conjunction	-5026 Apr 07 j 04:06	7° \approx 16'46	-2°-15'-4
minimum elong	-5034 Mar 19 j 06:48	19° \approx 15'20	2°17'17	minimum elong	-5026 Apr 07 j 04:06	7° \approx 16'46	2°15'14
max. Earth dist.	-5034 Mar 19 j 19:43	19° \approx 16'33	30.82302 AU	max. Earth dist.	-5026 Apr 07 j 08:23	7° \approx 17'09	30.83704 AU
retrograde	-5034 Jul 04 j 05:11	21° \approx 49'20		retrograde	-5026 Jul 22 j 09:33	9° \approx 49'35	
opposition	-5034 Sep 20 j 21:22	20° \approx 24'27	-2°-26'-52	opposition	-5026 Oct 08 j 10:40	8° \approx 25'00	-2°-23'-50
min. Earth dist.	-5034 Sep 20 j 11:01	20° \approx 25'11	28.82553 AU	min. Earth dist.	-5026 Oct 08 j 06:27	8° \approx 25'18	28.84181 AU
direct	-5034 Dec 07 j 09:26	19° \approx 00'08		direct	-5026 Dec 25 j 09:48	7° \approx 00'08	
conjunction	-5033 Mar 21 j 21:32	21° \approx 30'54	-2°-17'-32	conjunction	-5025 Apr 09 j 18:44	9° \approx 31'34	-2°-13'-53
minimum elong	-5033 Mar 21 j 21:32	21° \approx 30'54	2°17'44	minimum elong	-5025 Apr 09 j 18:45	9° \approx 31'34	2°14'01
max. Earth dist.	-5033 Mar 22 j 08:15	21° \approx 31'54	30.82428 AU	max. Earth dist.	-5025 Apr 09 j 23:21	9° \approx 32'00	30.84351 AU
retrograde	-5033 Jul 06 j 19:46	24° \approx 04'46		retrograde	-5025 Jul 24 j 20:20	12° \approx 04'16	
opposition	-5033 Sep 23 j 08:12	22° \approx 39'55	-2°-27'-16	opposition	-5025 Oct 10 j 21:10	10° \approx 39'46	-2°-22'-27
min. Earth dist.	-5033 Sep 22 j 22:25	22° \approx 40'37	28.82640 AU	min. Earth dist.	-5025 Oct 10 j 17:56	10° \approx 40'00	28.84874 AU
direct	-5033 Dec 09 j 22:33	21° \approx 15'32		direct	-5025 Dec 27 j 21:22	9° \approx 14'53	
conjunction	-5032 Mar 23 j 12:21	23° \approx 46'24	-2°-17'-49	conjunction	-5024 Apr 11 j 09:17	11° \approx 46'25	-2°-12'-30
minimum elong	-5032 Mar 23 j 12:21	23° \approx 46'24	2°18'01	minimum elong	-5024 Apr 11 j 09:18	11° \approx 46'25	2°12'38
max. Earth dist.	-5032 Mar 23 j 22:38	23° \approx 47'21	30.82476 AU	max. Earth dist.	-5024 Apr 11 j 11:58	11° \approx 46'40	30.85101 AU
retrograde	-5032 Jul 08 j 07:47	26° \approx 20'09		retrograde	-5024 Jul 26 j 09:34	14° \approx 18'59	
opposition	-5032 Sep 24 j 19:06	24° \approx 55'19	-2°-27'-27	opposition	-5024 Oct 12 j 07:36	12° \approx 54'36	-2°-20'-51
min. Earth dist.	-5032 Sep 24 j 11:04	24° \approx 55'53	28.82665 AU	min. Earth dist.	-5024 Oct 12 j 04:46	12° \approx 54'48	28.85651 AU
direct	-5032 Dec 11 j 11:24	23° \approx 30'51		direct	-5024 Dec 29 j 09:57	11° \approx 29'42	
conjunction	-5031 Mar 26 j 03:00	26° \approx 01'47	-2°-17'-53	conjunction	-5023 Apr 14 j 00:01	14° \approx 01'21	-2°-10'-54
minimum elong	-5031 Mar 26 j 03:00	26° \approx 01'47	2°18'04	minimum elong	-5023 Apr 14 j 00:02	14° \approx 01'21	2°11'00
max. Earth dist.	-5031 Mar 26 j 11:50	26° \approx 02'37	30.82502 AU	max. Earth dist.	-5023 Apr 14 j 02:28	14° \approx 01'35	30.85882 AU
retrograde	-5031 Jul 10 j 21:33	28° \approx 35'23		retrograde	-5023 Jul 28 j 20:56	16° \approx 33'47	
opposition	-5031 Sep 27 j 05:46	27° \approx 10'35	-2°-27'-24	opposition	-5023 Oct 14 j 18:13	15° \approx 09'29	-2°-19'-2
min. Earth dist.	-5031 Sep 26 j 21:42	27° \approx 11'09	28.82684 AU	min. Earth dist.	-5023 Oct 14 j 17:15	15° \approx 09'33	28.86419 AU
direct	-5031 Dec 14 j 00:40	25° \approx 46'01		direct	-5023 Dec 31 j 22:20	13° \approx 44'34	
conjunction	-5030 Mar 28 j 17:45	28° \approx 17'02	-2°-17'-44	conjunction	-5022 Apr 16 j 14:47	16° \approx 16'19	-2°-9'-6
minimum elong	-5030 Mar 28 j 17:45	28° \approx 17'02	2°17'55	minimum elong	-5022 Apr 16 j 14:48	16° \approx 16'19	2°09'12
max. Earth dist.	-5030 Mar 29 j 01:33	28° \approx 17'46	30.82527 AU	max. Earth dist.	-5022 Apr 16 j 15:23	16° \approx 16'22	30.86636 AU
	-5030 May 17 j 23:27	0° \approx		retrograde	-5022 Jul 31 j 10:43	18° \approx 48'36	
retrograde	-5030 Jul 13 j 09:39	0° \approx 50'28		opposition	-5022 Oct 17 j 04:41	17° \approx 24'23	-2°-17'00
	-5030 Sep 09 j 00:32	30° \approx		min. Earth dist.	-5022 Oct 17 j 03:52	17° \approx 24'26	28.87133 AU
opposition	-5030 Sep 29 j 16:26	29° \approx 25'41	-2°-27'-8	direct	-5021 Jan 03 j 11:32	15° \approx 59'26	
min. Earth dist.	-5030 Sep 29 j 10:10	29° \approx 26'08	28.82742 AU				
direct	-5030 Dec 16 j 12:02	28° \approx 01'03		conjunction	-5021 Apr 19 j 05:34	18° \approx 31'16	-2°-7'-6
	-5029 Mar 16 j 21:27	0° \approx		minimum elong	-5021 Apr 19 j 05:34	18° \approx 31'16	2°07'11
				max. Earth dist.	-5021 Apr 19 j 04:58	18° \approx 31'12	30.87306 AU
conjunction	-5029 Mar 31 j 08:28	0° \approx 32'08	-2°-17'-23	retrograde	-5021 Aug 02 j 22:57	21° \approx 03'23	
minimum elong	-5029 Mar 31 j 08:28	0° \approx 32'08	2°17'33	opposition	-5021 Oct 19 j 15:23	19° \approx 39'14	-2°-14'-46
max. Earth dist.	-5029 Mar 31 j 15:49	0° \approx 32'50	30.82631 AU	min. Earth dist.	-5021 Oct 19 j 16:36	19° \approx 39'08	28.87764 AU

Attention, astronomical year style is used: The year -5020 in astronomical counting style is the year 5021 BCE in historical counting style.

direct	-5020 Jan 05 j 23:35	18° ✕ 14'15		opposition	-5013 Nov 06 j 02:20	7° Υ 33'18	-1°-50'-2
				min. Earth dist.	-5013 Nov 06 j 08:57	7° Υ 32'50	28.93221 AU
conjunction	-5020 Apr 20 j 20:07	20° ✕ 46'08	-2°-4'-55	direct	-5012 Jan 24 j 00:58	6° Υ 08'00	
minimum elong	-5020 Apr 20 j 20:08	20° ✕ 46'08	2°05'00				
max. Earth dist.	-5020 Apr 20 j 18:28	20° ✕ 45'59	30.87908 AU	conjunction	-5012 May 09 j 14:43	8° Υ 40'18	-1°-41'-7
retrograde	-5020 Aug 04 j 12:04	23° ✕ 18'05		minimum elong	-5012 May 09 j 14:43	8° Υ 40'18	1°41'06
opposition	-5020 Oct 21 j 01:52	21° ✕ 53'58	-2°-12'-20	max. Earth dist.	-5012 May 09 j 05:52	8° Υ 39'29	30.93679 AU
min. Earth dist.	-5020 Oct 21 j 03:17	21° ✕ 53'52	28.88314 AU	retrograde	-5012 Aug 22 j 06:28	11° Υ 10'53	
direct	-5019 Jan 07 j 13:21	20° ✕ 28'56		opposition	-5012 Nov 07 j 12:47	9° Υ 47'21	-1°-46'-9
				min. Earth dist.	-5012 Nov 07 j 21:08	9° Υ 46'45	28.94347 AU
conjunction	-5019 Apr 23 j 10:45	23° ✕ 00'52	-2°-2'-33	direct	-5011 Jan 25 j 13:17	8° Υ 22'04	
minimum elong	-5019 Apr 23 j 10:46	23° ✕ 00'52	2°02'37				
max. Earth dist.	-5019 Apr 23 j 07:20	23° ✕ 00'33	30.88433 AU	conjunction	-5011 May 12 j 04:52	10° Υ 54'27	-1°-37'-24
retrograde	-5019 Aug 06 j 23:03	25° ✕ 32'38		minimum elong	-5011 May 12 j 04:53	10° Υ 54'27	1°37'22
opposition	-5019 Oct 23 j 12:18	24° ✕ 08'34	-2°-9'-42	max. Earth dist.	-5011 May 11 j 19:06	10° Υ 53'32	30.94836 AU
min. Earth dist.	-5019 Oct 23 j 15:31	24° ✕ 08'20	28.88823 AU	retrograde	-5011 Aug 24 j 19:16	13° Υ 24'53	
direct	-5018 Jan 10 j 00:31	22° ✕ 43'28		opposition	-5011 Nov 09 j 23:00	12° Υ 01'28	-1°-42'-5
				min. Earth dist.	-5011 Nov 10 j 07:29	12° Υ 00'52	28.95489 AU
conjunction	-5018 Apr 26 j 01:27	25° ✕ 15'27	-2°00'00	direct	-5010 Jan 28 j 03:21	10° Υ 36'12	
minimum elong	-5018 Apr 26 j 01:27	25° ✕ 15'27	2°00'05				
max. Earth dist.	-5018 Apr 25 j 21:46	25° ✕ 15'06	30.88941 AU	conjunction	-5010 May 14 j 19:03	13° Υ 08'39	-1°-33'-32
retrograde	-5018 Aug 09 j 10:09	27° ✕ 47'00		minimum elong	-5010 May 14 j 19:03	13° Υ 08'39	1°33'30
opposition	-5018 Oct 25 j 22:42	26° ✕ 23'00	-2°-6'-53	max. Earth dist.	-5010 May 14 j 07:46	13° Υ 07'36	30.95963 AU
min. Earth dist.	-5018 Oct 26 j 02:25	26° ✕ 22'44	28.89319 AU	retrograde	-5010 Aug 27 j 06:42	15° Υ 38'57	
direct	-5017 Jan 12 j 13:38	24° ✕ 57'50		opposition	-5010 Nov 12 j 09:34	14° Υ 15'38	-1°-37'-53
				min. Earth dist.	-5010 Nov 12 j 19:47	14° Υ 14'55	28.96591 AU
conjunction	-5017 Apr 28 j 15:44	27° ✕ 29'51	-1°-57'-17	direct	-5009 Jan 30 j 14:32	12° Υ 50'23	
minimum elong	-5017 Apr 28 j 15:44	27° ✕ 29'51	1°57'20				
max. Earth dist.	-5017 Apr 28 j 10:03	27° ✕ 29'19	30.89459 AU	conjunction	-5009 May 17 j 09:05	15° Υ 22'53	-1°-29'-31
	-5017 Aug 03 j 11:07	0° Υ		minimum elong	-5009 May 17 j 09:06	15° Υ 22'53	1°29'29
retrograde	-5017 Aug 11 j 21:56	0° Υ 01'13		max. Earth dist.	-5009 May 16 j 21:27	15° Υ 21'48	30.97024 AU
	-5017 Aug 20 j 08:16	30° ✕		retrograde	-5009 Aug 29 j 18:30	17° Υ 53'00	
opposition	-5017 Oct 28 j 09:04	28° ✕ 37'15	-2°-3'-53	opposition	-5009 Nov 14 j 20:05	16° Υ 29'47	-1°-33'-32
min. Earth dist.	-5017 Oct 28 j 13:37	28° ✕ 36'56	28.89871 AU	min. Earth dist.	-5009 Nov 15 j 06:54	16° Υ 29'01	28.97589 AU
direct	-5016 Jan 15 j 00:05	27° ✕ 12'01		direct	-5008 Feb 02 j 04:08	15° Υ 04'32	
conjunction	-5016 Apr 30 j 06:08	29° ✕ 44'05	-1°-54'-23	conjunction	-5008 May 18 j 23:03	17° Υ 37'02	-1°-25'-23
minimum elong	-5016 Apr 30 j 06:09	29° ✕ 44'05	1°54'26	minimum elong	-5008 May 18 j 23:04	17° Υ 37'03	1°25'21
max. Earth dist.	-5016 Apr 30 j 00:43	29° ✕ 43'35	30.90053 AU	max. Earth dist.	-5008 May 18 j 09:12	17° Υ 35'45	30.97976 AU
	-5016 May 07 j 09:32	0° Υ		retrograde	-5008 Aug 31 j 06:14	20° Υ 07'00	
retrograde	-5016 Aug 13 j 07:32	2° Υ 15'16		opposition	-5008 Nov 16 j 06:29	18° Υ 43'50	-1°-29'-2
opposition	-5016 Oct 29 j 19:22	0° Υ 51'22	-2°00'-41	min. Earth dist.	-5008 Nov 16 j 18:22	18° Υ 42'59	28.98490 AU
min. Earth dist.	-5016 Oct 30 j 00:52	0° Υ 50'58	28.90508 AU	direct	-5007 Feb 03 j 15:03	17° Υ 18'32	
	-5016 Dec 01 j 02:09	30° ✕					
direct	-5015 Jan 16 j 12:01	29° ✕ 26'05		conjunction	-5007 May 21 j 13:07	19° Υ 51'04	-1°-21'-8
	-5015 Mar 03 j 08:34	0° Υ		minimum elong	-5007 May 21 j 13:08	19° Υ 51'04	1°21'05
				max. Earth dist.	-5007 May 20 j 23:08	19° Υ 49'46	30.98825 AU
conjunction	-5015 May 02 j 20:18	1° Υ 58'11	-1°-51'-19	retrograde	-5007 Sep 02 j 15:13	22° Υ 20'50	
minimum elong	-5015 May 02 j 20:19	1° Υ 58'11	1°51'20	opposition	-5007 Nov 18 j 17:01	20° Υ 57'43	-1°-24'-26
max. Earth dist.	-5015 May 02 j 13:02	1° Υ 57'31	30.90763 AU	min. Earth dist.	-5007 Nov 19 j 06:12	20° Υ 56'47	28.99276 AU
retrograde	-5015 Aug 15 j 19:26	4° Υ 29'13		direct	-5006 Feb 06 j 04:02	19° Υ 32'23	
opposition	-5015 Nov 01 j 05:40	3° Υ 05'22	-1°-57'-19	max. Earth dist.	-5006 May 23 j 10:41	22° Υ 03'23	30.99582 AU
min. Earth dist.	-5015 Nov 01 j 11:14	3° Υ 04'58	28.91278 AU				
direct	-5014 Jan 19 j 00:27	1° Υ 40'03		conjunction	-5006 May 24 j 02:50	22° Υ 04'54	-1°-16'-45
				minimum elong	-5006 May 24 j 02:51	22° Υ 04'54	1°16'41
conjunction	-5014 May 05 j 10:36	4° Υ 12'13	-1°-48'-4	retrograde	-5006 Sep 05 j 02:02	24° Υ 34'27	
minimum elong	-5014 May 05 j 10:37	4° Υ 12'13	1°48'05	opposition	-5006 Nov 21 j 03:22	23° Υ 11'23	-1°-19'-42
max. Earth dist.	-5014 May 05 j 03:34	4° Υ 11'34	30.91599 AU	min. Earth dist.	-5006 Nov 21 j 16:52	23° Υ 10'26	29.00002 AU
retrograde	-5014 Aug 18 j 05:39	6° Υ 43'05		direct	-5005 Feb 08 j 15:58	21° Υ 45'59	
opposition	-5014 Nov 03 j 16:02	5° Υ 19'20	-1°-53'-46				
min. Earth dist.	-5014 Nov 03 j 23:03	5° Υ 18'50	28.92180 AU	conjunction	-5005 May 26 j 16:34	24° Υ 18'29	-1°-12'-17
direct	-5013 Jan 21 j 12:16	3° Υ 54'01		minimum elong	-5005 May 26 j 16:35	24° Υ 18'29	1°12'12
				max. Earth dist.	-5005 May 26 j 00:34	24° Υ 17'00	31.00291 AU
conjunction	-5013 May 08 j 00:42	6° Υ 26'14	-1°-44'-40	retrograde	-5005 Sep 07 j 11:26	26° Υ 47'51	
minimum elong	-5013 May 08 j 00:43	6° Υ 26'14	1°44'41	opposition	-5005 Nov 23 j 13:53	25° Υ 24'48	-1°-14'-51
max. Earth dist.	-5013 May 07 j 16:18	6° Υ 25'27	30.92587 AU	min. Earth dist.	-5005 Nov 24 j 04:59	25° Υ 23'44	29.00703 AU
retrograde	-5013 Aug 20 j 18:36	8° Υ 56'57		direct	-5004 Feb 11 j 03:22	23° Υ 59'21	

Attention, astronomical year style is used: The year -5004 in astronomical counting style is the year 5005 BCE in historical counting style.

conjunction	-5004 May 28 j 05:53	26° Υ 31'48	-1°-7'-42	conjunction	-4996 Jun 15 j 14:14	14° \mathcal{B} 14'25	0°-28'-7
minimum elong	-5004 May 28 j 05:53	26° Υ 31'48	1°07'36	minimum elong	-4996 Jun 15 j 14:15	14° \mathcal{B} 14'25	0°27'57
max. Earth dist.	-5004 May 27 j 12:28	26° Υ 30'11	31.01011 AU	max. Earth dist.	-4996 Jun 14 j 16:54	14° \mathcal{B} 12'26	31.09261 AU
retrograde	-5004 Sep 08 j 22:38	29° Υ 00'58			-4996 Jul 06 j 07:28	15° \mathcal{B}	
opposition	-5004 Nov 25 j 00:11	27° Υ 37'57	-1°-9'-54	retrograde	-4996 Sep 26 j 11:42	16° \mathcal{B} 42'29	
min. Earth dist.	-5004 Nov 25 j 14:55	27° Υ 36'55	29.01433 AU	opposition	-4996 Dec 12 j 12:10	15° \mathcal{B} 20'06	0°-27'-19
direct	-5003 Feb 12 j 16:34	26° Υ 12'26		min. Earth dist.	-4996 Dec 13 j 08:26	15° \mathcal{B} 18'41	29.09773 AU
					-4996 Dec 24 j 14:10	15° $\mathcal{R}\mathcal{B}$	
conjunction	-5003 May 30 j 19:18	28° Υ 44'53	-1°-3'-1	direct	-4995 Mar 02 j 17:57	13° \mathcal{B} 54'42	
minimum elong	-5003 May 30 j 19:18	28° Υ 44'53	1°02'55		-4995 May 07 j 12:43	15° \mathcal{B}	
max. Earth dist.	-5003 May 30 j 01:39	28° Υ 43'14	31.01767 AU	max. Earth dist.	-4995 Jun 17 j 04:01	16° \mathcal{B} 25'04	31.10197 AU
	-5003 Jul 04 j 23:45	0° \mathcal{B}					
retrograde	-5003 Sep 11 j 08:49	1° \mathcal{B} 13'52		conjunction	-4995 Jun 18 j 02:56	16° \mathcal{B} 27'12	0°-22'-55
	-5003 Nov 22 j 00:47	30° $\mathcal{R}\Upsilon$		minimum elong	-4995 Jun 18 j 02:57	16° \mathcal{B} 27'12	0°22'46
opposition	-5003 Nov 27 j 10:35	29° Υ 50'52	-1°-4'-51	retrograde	-4995 Sep 28 j 22:24	18° \mathcal{B} 55'09	
min. Earth dist.	-5003 Nov 28 j 02:47	29° Υ 49'44	29.02234 AU	opposition	-4995 Dec 14 j 22:43	17° \mathcal{B} 32'49	0°-21'-44
direct	-5002 Feb 15 j 05:08	28° Υ 25'20		min. Earth dist.	-4995 Dec 15 j 18:42	17° \mathcal{B} 31'25	29.10646 AU
	-5002 May 06 j 18:56	0° \mathcal{B}		direct	-4994 Mar 05 j 06:55	16° \mathcal{B} 07'24	
conjunction	-5002 Jun 02 j 08:33	0° \mathcal{B} 57'45	0°-58'-15	conjunction	-4994 Jun 20 j 15:38	18° \mathcal{B} 39'53	0°-17'-42
minimum elong	-5002 Jun 02 j 08:34	0° \mathcal{B} 57'45	0°58'09	minimum elong	-4994 Jun 20 j 15:39	18° \mathcal{B} 39'53	0°17'31
max. Earth dist.	-5002 Jun 01 j 14:21	0° \mathcal{B} 56'04	31.02630 AU	max. Earth dist.	-4994 Jun 19 j 16:27	18° \mathcal{B} 37'44	31.11014 AU
retrograde	-5002 Sep 13 j 20:18	3° \mathcal{B} 26'35		retrograde	-4994 Oct 01 j 08:15	21° \mathcal{B} 07'42	
opposition	-5002 Nov 29 j 21:00	2° \mathcal{B} 03'38	0°-59'-43	opposition	-4994 Dec 17 j 09:32	19° \mathcal{B} 45'23	0°-16'-8
min. Earth dist.	-5002 Nov 30 j 12:43	2° \mathcal{B} 02'32	29.03144 AU	min. Earth dist.	-4994 Dec 18 j 07:05	19° \mathcal{B} 43'53	29.11424 AU
direct	-5001 Feb 17 j 19:15	0° \mathcal{B} 38'05		direct	-4993 Mar 07 j 19:10	18° \mathcal{B} 19'58	
				max. Earth dist.	-4993 Jun 22 j 04:04	20° \mathcal{B} 50'10	31.11761 AU
conjunction	-5001 Jun 04 j 21:32	3° \mathcal{B} 10'30	0°-53'-24	conjunction	-4993 Jun 23 j 03:55	20° \mathcal{B} 52'23	0°-12'-28
minimum elong	-5001 Jun 04 j 21:32	3° \mathcal{B} 10'30	0°53'18	minimum elong	-4993 Jun 23 j 03:55	20° \mathcal{B} 52'23	0°12'17
max. Earth dist.	-5001 Jun 04 j 02:38	3° \mathcal{B} 08'45	31.03605 AU	behind sun begin	-4993 Jun 22 j 23:37	20° \mathcal{B} 52'00	
retrograde	-5001 Sep 16 j 07:15	5° \mathcal{B} 39'11		behind sun end	-4993 Jun 23 j 08:12	20° \mathcal{B} 52'46	
opposition	-5001 Dec 02 j 07:29	4° \mathcal{B} 16'18	0°-54'-29	retrograde	-4993 Oct 03 j 19:00	23° \mathcal{B} 20'03	
min. Earth dist.	-5001 Dec 03 j 00:13	4° \mathcal{B} 15'08	29.04187 AU	opposition	-4993 Dec 19 j 20:09	21° \mathcal{B} 57'45	0°-10'-31
direct	-5000 Feb 20 j 06:28	2° \mathcal{B} 50'46		min. Earth dist.	-4993 Dec 20 j 17:22	21° \mathcal{B} 56'17	29.12134 AU
				direct	-4992 Mar 09 j 08:55	20° \mathcal{B} 32'19	
conjunction	-5000 Jun 06 j 10:37	5° \mathcal{B} 23'12	0°-48'-29	conjunction	-4992 Jun 24 j 16:11	23° \mathcal{B} 04'40	0°-7'-13
minimum elong	-5000 Jun 06 j 10:38	5° \mathcal{B} 23'12	0°48'21	minimum elong	-4992 Jun 24 j 16:11	23° \mathcal{B} 04'40	0°07'02
max. Earth dist.	-5000 Jun 05 j 16:00	5° \mathcal{B} 21'29	31.04710 AU	behind sun begin	-4992 Jun 24 j 10:08	23° \mathcal{B} 04'08	
retrograde	-5000 Sep 17 j 18:31	7° \mathcal{B} 51'44		behind sun end	-4992 Jun 24 j 22:14	23° \mathcal{B} 05'13	
opposition	-5000 Dec 03 j 17:46	6° \mathcal{B} 28'58	0°-49'-11	max. Earth dist.	-4992 Jun 23 j 15:37	23° \mathcal{B} 02'24	31.12454 AU
min. Earth dist.	-5000 Dec 04 j 10:41	6° \mathcal{B} 27'47	29.05322 AU	retrograde	-4992 Oct 05 j 05:37	25° \mathcal{B} 32'12	
direct	-4999 Feb 21 j 20:12	5° \mathcal{B} 03'28		opposition	-4992 Dec 21 j 06:42	24° \mathcal{B} 09'55	0°-4'-54
conjunction	-4999 Jun 08 j 23:36	7° \mathcal{B} 35'56	0°-43'-28	min. Earth dist.	-4992 Dec 22 j 05:00	24° \mathcal{B} 08'22	29.12835 AU
minimum elong	-4999 Jun 08 j 23:36	7° \mathcal{B} 35'56	0°43'21	direct	-4991 Mar 11 j 20:27	22° \mathcal{B} 44'26	
max. Earth dist.	-4999 Jun 08 j 03:29	7° \mathcal{B} 34'04	31.05884 AU	max. Earth dist.	-4991 Jun 26 j 04:11	25° \mathcal{B} 14'30	31.13165 AU
retrograde	-4999 Sep 20 j 06:11	10° \mathcal{B} 04'21					
opposition	-4999 Dec 06 j 04:15	8° \mathcal{B} 41'41	0°-43'-48	conjunction	-4991 Jun 27 j 04:21	25° \mathcal{B} 16'44	0°-1'-57
min. Earth dist.	-4999 Dec 06 j 21:42	8° \mathcal{B} 40'28	29.06516 AU	minimum elong	-4991 Jun 27 j 04:20	25° \mathcal{B} 16'44	0°01'46
direct	-4998 Feb 24 j 07:18	7° \mathcal{B} 16'14		behind sun begin	-4991 Jun 26 j 21:48	25° \mathcal{B} 16'09	
				behind sun end	-4991 Jun 27 j 10:52	25° \mathcal{B} 17'19	
conjunction	-4998 Jun 11 j 12:36	9° \mathcal{B} 48'43	0°-38'-25	retrograde	-4991 Oct 07 j 16:34	27° \mathcal{B} 44'06	
minimum elong	-4998 Jun 11 j 12:36	9° \mathcal{B} 48'43	0°38'16	asc. node	-4991 Nov 07 j 14:37	27° \mathcal{B} 28'10	
max. Earth dist.	-4998 Jun 10 j 16:54	9° \mathcal{B} 46'54	31.07072 AU	opposition	-4991 Dec 23 j 17:23	26° \mathcal{B} 21'50	0°00'43
retrograde	-4998 Sep 22 j 15:15	12° \mathcal{B} 17'02		min. Earth dist.	-4991 Dec 24 j 15:38	26° \mathcal{B} 20'17	29.13560 AU
opposition	-4998 Dec 08 j 14:52	10° \mathcal{B} 54'29	0°-38'-21	direct	-4990 Mar 14 j 11:24	24° \mathcal{B} 56'21	
min. Earth dist.	-4998 Dec 09 j 09:22	10° \mathcal{B} 53'11	29.07679 AU				
direct	-4997 Feb 26 j 20:01	9° \mathcal{B} 29'03		conjunction	-4990 Jun 29 j 16:07	27° \mathcal{B} 28'35	0°03'25
max. Earth dist.	-4997 Jun 13 j 03:49	11° \mathcal{B} 59'34	31.08213 AU	minimum elong	-4990 Jun 29 j 16:07	27° \mathcal{B} 28'35	0°03'38
				behind sun begin	-4990 Jun 29 j 09:39	27° \mathcal{B} 28'00	
conjunction	-4997 Jun 14 j 01:24	12° \mathcal{B} 01'34	0°-33'-17	behind sun end	-4990 Jun 29 j 22:36	27° \mathcal{B} 29'09	
minimum elong	-4997 Jun 14 j 01:24	12° \mathcal{B} 01'34	0°33'08	max. Earth dist.	-4990 Jun 28 j 15:01	27° \mathcal{B} 26'15	31.13926 AU
retrograde	-4997 Sep 25 j 02:18	14° \mathcal{B} 29'46		retrograde	-4990 Oct 10 j 03:24	29° \mathcal{B} 55'49	
opposition	-4997 Dec 11 j 01:24	13° \mathcal{B} 07'18	0°-32'-51	opposition	-4990 Dec 26 j 04:06	28° \mathcal{B} 33'34	0°06'20
min. Earth dist.	-4997 Dec 11 j 20:00	13° \mathcal{B} 05'59	29.08785 AU	min. Earth dist.	-4990 Dec 27 j 02:15	28° \mathcal{B} 32'02	29.14382 AU
direct	-4996 Feb 29 j 07:08	11° \mathcal{B} 41'53		direct	-4989 Mar 16 j 23:25	27° \mathcal{B} 08'04	

Attention, astronomical year style is used: The year -4989 in astronomical counting style is the year 4990 BCE in historical counting style.

max. Earth dist.	-4989 Jul 01 j 03:54	29° 8 38'00	31.14801 AU	retrograde	-4982 Oct 27 j 11:37	17° II 27'40	
				opposition	-4981 Jan 12 j 19:40	16° II 05'51	0°50'12
conjunction	-4989 Jul 02 j 03:59	29° 8 40'15	0°08'39	min. Earth dist.	-4981 Jan 13 j 19:34	16° II 04'12	29.22410 AU
minimum elong	-4989 Jul 02 j 03:58	29° 8 40'14	0°08'51	direct	-4981 Apr 04 j 00:15	14° II 40'38	
behind sun begin	-4989 Jul 01 j 22:22	29° 8 39'45					
behind sun end	-4989 Jul 02 j 09:34	29° 8 40'44		conjunction	-4981 Jul 19 j 23:21	17° II 12'27	0°49'30
	-4989 Jul 11 j 00:28	0° II		minimum elong	-4981 Jul 19 j 23:21	17° II 12'27	0°49'44
retrograde	-4989 Oct 12 j 11:57	2° II 07'22		max. Earth dist.	-4981 Jul 18 j 20:55	17° II 09'59	31.22700 AU
opposition	-4989 Dec 28 j 14:48	0° II 45'10	0°11'56	retrograde	-4981 Oct 29 j 22:45	19° II 39'00	
min. Earth dist.	-4989 Dec 29 j 13:22	0° II 43'35	29.15315 AU	opposition	-4980 Jan 15 j 06:43	18° II 17'11	0°55'26
	-4988 Jan 26 j 03:54	30° R 8		min. Earth dist.	-4980 Jan 16 j 06:42	18° II 15'32	29.23079 AU
direct	-4988 Mar 18 j 12:18	29° 8 19'40		direct	-4980 Apr 05 j 12:04	16° II 51'58	
	-4988 May 08 j 09:17	0° II		max. Earth dist.	-4980 Jul 20 j 08:56	19° II 21'20	31.23318 AU
conjunction	-4988 Jul 03 j 15:31	1° II 51'48	0°13'52	conjunction	-4980 Jul 21 j 10:27	19° II 23'43	0°54'21
minimum elong	-4988 Jul 03 j 15:31	1° II 51'48	0°14'06	minimum elong	-4980 Jul 21 j 10:26	19° II 23'43	0°54'37
behind sun begin	-4988 Jul 03 j 12:22	1° II 51'31		retrograde	-4980 Oct 31 j 07:35	21° II 50'11	
behind sun end	-4988 Jul 03 j 18:40	1° II 52'05		opposition	-4979 Jan 16 j 17:58	20° II 28'23	1°00'34
max. Earth dist.	-4988 Jul 02 j 14:21	1° II 49'28	31.15801 AU	min. Earth dist.	-4979 Jan 17 j 18:32	20° II 26'41	29.23660 AU
retrograde	-4988 Oct 13 j 22:45	4° II 18'49		direct	-4979 Apr 08 j 01:33	19° II 03'10	
opposition	-4988 Dec 30 j 01:30	2° II 56'40	0°17'31				
min. Earth dist.	-4988 Dec 30 j 23:23	2° II 55'09	29.16370 AU	conjunction	-4979 Jul 23 j 21:11	21° II 34'49	0°59'07
direct	-4987 Mar 20 j 23:49	1° II 31'13		minimum elong	-4979 Jul 23 j 21:11	21° II 34'49	0°59'22
max. Earth dist.	-4987 Jul 05 j 03:04	4° II 01'04	31.16893 AU	max. Earth dist.	-4979 Jul 22 j 18:40	21° II 32'20	31.23880 AU
				retrograde	-4979 Nov 02 j 18:19	24° II 01'12	
conjunction	-4987 Jul 06 j 03:14	4° II 03'19	0°19'04	opposition	-4978 Jan 19 j 05:07	22° II 39'24	1°05'37
minimum elong	-4987 Jul 06 j 03:13	4° II 03'19	0°19'18	min. Earth dist.	-4978 Jan 20 j 04:52	22° II 37'46	29.24225 AU
retrograde	-4987 Oct 16 j 07:49	6° II 30'16		direct	-4978 Apr 10 j 13:53	21° II 14'11	
opposition	-4986 Jan 01 j 12:21	5° II 08'11	0°23'05	max. Earth dist.	-4978 Jul 25 j 06:43	23° II 43'24	31.24445 AU
min. Earth dist.	-4986 Jan 02 j 11:21	5° II 06'36	29.17493 AU				
direct	-4986 Mar 23 j 10:50	3° II 42'47		conjunction	-4978 Jul 26 j 07:58	23° II 45'46	1°03'47
				minimum elong	-4978 Jul 26 j 07:58	23° II 45'46	1°04'04
conjunction	-4986 Jul 08 j 14:43	6° II 14'51	0°24'15	retrograde	-4978 Nov 05 j 03:13	26° II 12'06	
minimum elong	-4986 Jul 08 j 14:43	6° II 14'51	0°24'30	opposition	-4977 Jan 21 j 16:32	24° II 50'18	1°10'34
max. Earth dist.	-4986 Jul 07 j 13:45	6° II 12'32	31.18040 AU	min. Earth dist.	-4977 Jan 22 j 16:58	24° II 48'37	29.24822 AU
retrograde	-4986 Oct 18 j 17:54	8° II 41'43		direct	-4977 Apr 13 j 01:37	23° II 25'06	
opposition	-4985 Jan 03 j 23:14	7° II 19'44	0°28'37				
min. Earth dist.	-4985 Jan 04 j 21:22	7° II 18'12	29.18642 AU	conjunction	-4977 Jul 28 j 18:20	25° II 56'34	1°08'22
direct	-4985 Mar 25 j 22:59	5° II 54'23		minimum elong	-4977 Jul 28 j 18:20	25° II 56'34	1°08'38
max. Earth dist.	-4985 Jul 10 j 01:28	8° II 24'07	31.19164 AU	max. Earth dist.	-4977 Jul 27 j 16:50	25° II 54'11	31.25076 AU
				retrograde	-4977 Nov 07 j 12:34	28° II 22'52	
conjunction	-4985 Jul 11 j 02:07	8° II 26'25	0°29'24	opposition	-4976 Jan 24 j 03:44	27° II 01'05	1°15'25
minimum elong	-4985 Jul 11 j 02:07	8° II 26'25	0°29'39	min. Earth dist.	-4976 Jan 25 j 02:45	26° II 59'30	29.25498 AU
retrograde	-4985 Oct 21 j 03:26	10° II 53'14		direct	-4976 Apr 14 j 13:45	25° II 35'55	
opposition	-4984 Jan 06 j 10:19	9° II 31'18	0°34'06	max. Earth dist.	-4976 Jul 29 j 04:08	28° II 05'01	31.25787 AU
min. Earth dist.	-4984 Jan 07 j 09:42	9° II 29'41	29.19748 AU				
direct	-4984 Mar 27 j 09:45	8° II 06'00		conjunction	-4976 Jul 30 j 04:52	28° II 07'20	1°12'52
				minimum elong	-4976 Jul 30 j 04:51	28° II 07'20	1°13'08
conjunction	-4984 Jul 12 j 13:34	10° II 37'59	0°34'31				
minimum elong	-4984 Jul 12 j 13:33	10° II 37'59	0°34'46	retrograde	-4976 Sep 25 j 05:13	0° III	
max. Earth dist.	-4984 Jul 11 j 12:28	10° II 35'39	31.20228 AU				
retrograde	-4984 Oct 22 j 13:57	13° II 04'45					
opposition	-4983 Jan 07 j 21:13	11° II 42'52	0°39'32	opposition	-4975 Jan 25 j 15:02	29° II 11'51	1°20'09
min. Earth dist.	-4983 Jan 08 j 20:10	11° II 41'17	29.20755 AU	min. Earth dist.	-4975 Jan 26 j 14:37	29° II 10'14	29.26266 AU
direct	-4983 Mar 29 j 22:19	10° II 17'36		direct	-4975 Apr 16 j 23:46	27° II 46'44	
max. Earth dist.	-4983 Jul 13 j 23:14	12° II 47'09	31.21169 AU		-4975 Jul 24 j 13:34	0° III	
				conjunction	-4975 Aug 01 j 15:16	0° III 18'05	1°17'14
conjunction	-4983 Jul 15 j 01:00	12° II 49'33	0°39'34	minimum elong	-4975 Aug 01 j 15:16	0° III 18'05	1°17'30
minimum elong	-4983 Jul 15 j 00:59	12° II 49'33	0°39'49	max. Earth dist.	-4975 Jul 31 j 14:57	0° III 15'49	31.26600 AU
retrograde	-4983 Oct 25 j 00:55	15° II 16'15		retrograde	-4975 Nov 11 j 07:52	2° III 44'22	
opposition	-4982 Jan 10 j 08:26	13° II 54'24	0°44'54	opposition	-4974 Jan 28 j 02:26	1° III 22'39	1°24'46
min. Earth dist.	-4982 Jan 11 j 08:19	13° II 52'45	29.21650 AU	min. Earth dist.	-4974 Jan 29 j 00:51	1° III 21'07	29.27105 AU
direct	-4982 Apr 01 j 09:47	12° II 29'10			-4974 Apr 07 j 06:03	30° R II	
max. Earth dist.	-4982 Jul 16 j 10:56	14° II 58'41	31.21996 AU	direct	-4974 Apr 19 j 11:10	29° II 57'37	
					-4974 May 01 j 16:48	0° III	
conjunction	-4982 Jul 17 j 12:14	15° II 01'03	0°44'34	max. Earth dist.	-4974 Aug 03 j 01:11	2° III 26'38	31.27454 AU
minimum elong	-4982 Jul 17 j 12:14	15° II 01'03	0°44'49				

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Attention, astronomical year style is used: The year -4974 in astronomical counting style is the year 4975 BCE in historical counting style.

conjunction	-4974 Aug 04 j 01:27	2° $\overline{28}$ '54	1°21'30	opposition	-4965 Feb 17 j 12:25	21° $\overline{00}$ '17	2°00'07
minimum elong	-4974 Aug 04 j 01:26	2° $\overline{28}$ '54	1°21'47	min. Earth dist.	-4965 Feb 18 j 08:55	20° $\overline{58}$ '53	29.31378 AU
retrograde	-4974 Nov 13 j 18:58	4° $\overline{55}$ '13		direct	-4965 May 10 j 01:00	19° $\overline{35}$ '33	
opposition	-4973 Jan 30 j 13:58	3° $\overline{33}$ '32	1°29'16				
min. Earth dist.	-4973 Jan 31 j 12:41	3° $\overline{31}$ '59	29.27982 AU	conjunction	-4965 Aug 23 j 19:18	22° $\overline{05}$ '59	1°53'57
direct	-4973 Apr 21 j 22:05	2° $\overline{08}$ '35		minimum elong	-4965 Aug 23 j 19:18	22° $\overline{05}$ '59	1°54'11
				max. Earth dist.	-4965 Aug 22 j 21:45	22° $\overline{03}$ '58	31.31297 AU
conjunction	-4973 Aug 06 j 11:45	4° $\overline{39}$ '49	1°25'39	retrograde	-4965 Dec 03 j 14:37	24° $\overline{32}$ '20	
minimum elong	-4973 Aug 06 j 11:45	4° $\overline{39}$ '49	1°25'55	opposition	-4964 Feb 20 j 00:14	23° $\overline{10}$ '30	2°03'14
max. Earth dist.	-4973 Aug 05 j 12:34	4° $\overline{37}$ '39	31.28316 AU	min. Earth dist.	-4964 Feb 20 j 20:37	23° $\overline{09}$ '07	29.31519 AU
retrograde	-4973 Nov 16 j 05:56	7° $\overline{06}$ '09		direct	-4964 May 11 j 11:34	21° $\overline{45}$ '48	
opposition	-4972 Feb 02 j 01:27	5° $\overline{44}$ '31	1°33'38	max. Earth dist.	-4964 Aug 24 j 08:55	24° $\overline{14}$ '15	31.31466 AU
min. Earth dist.	-4972 Feb 02 j 23:53	5° $\overline{42}$ '59	29.28817 AU				
direct	-4972 Apr 23 j 11:17	4° $\overline{19}$ '38		conjunction	-4964 Aug 25 j 04:52	24° $\overline{16}$ '08	1°56'47
				minimum elong	-4964 Aug 25 j 04:52	24° $\overline{16}$ '08	1°57'03
conjunction	-4972 Aug 07 j 21:57	6° $\overline{50}$ '49	1°29'41	retrograde	-4964 Dec 05 j 00:45	26° $\overline{42}$ '30	
minimum elong	-4972 Aug 07 j 21:56	6° $\overline{50}$ '49	1°29'58	opposition	-4963 Feb 21 j 12:15	25° $\overline{20}$ '39	2°06'11
max. Earth dist.	-4972 Aug 06 j 21:58	6° $\overline{48}$ '34	31.29108 AU	min. Earth dist.	-4963 Feb 22 j 07:39	25° $\overline{19}$ '20	29.31725 AU
retrograde	-4972 Nov 17 j 17:29	9° $\overline{17}$ '10		direct	-4963 May 13 j 23:57	23° $\overline{55}$ '59	
opposition	-4971 Feb 03 j 13:06	7° $\overline{55}$ '33	1°37'52				
min. Earth dist.	-4971 Feb 04 j 11:15	7° $\overline{54}$ '03	29.29572 AU	conjunction	-4963 Aug 27 j 14:09	26° $\overline{26}$ '13	1°59'28
direct	-4971 Apr 25 j 22:13	6° $\overline{30}$ '44		minimum elong	-4963 Aug 27 j 14:09	26° $\overline{26}$ '13	1°59'42
max. Earth dist.	-4971 Aug 09 j 09:23	8° $\overline{59}$ '43	31.29786 AU	max. Earth dist.	-4963 Aug 26 j 18:06	26° $\overline{24}$ '20	31.31714 AU
				retrograde	-4963 Dec 07 j 12:23	28° $\overline{52}$ '40	
conjunction	-4971 Aug 10 j 08:11	9° $\overline{01}$ '51	1°33'35	opposition	-4962 Feb 24 j 00:18	27° $\overline{30}$ '48	2°08'58
minimum elong	-4971 Aug 10 j 08:11	9° $\overline{01}$ '51	1°33'51	min. Earth dist.	-4962 Feb 24 j 18:36	27° $\overline{29}$ '34	29.32025 AU
retrograde	-4971 Nov 20 j 03:10	11° $\overline{28}$ '12		direct	-4962 May 16 j 10:04	26° $\overline{06}$ '12	
opposition	-4970 Feb 06 j 01:00	10° $\overline{06}$ '37	1°41'58				
min. Earth dist.	-4970 Feb 06 j 23:34	10° $\overline{05}$ '05	29.30183 AU	conjunction	-4962 Aug 29 j 23:37	28° $\overline{36}$ '23	2°01'58
direct	-4970 Apr 28 j 11:45	8° $\overline{41}$ '51		minimum elong	-4962 Aug 29 j 23:36	28° $\overline{36}$ '23	2°02'14
				max. Earth dist.	-4962 Aug 29 j 05:25	28° $\overline{34}$ '40	31.32041 AU
conjunction	-4970 Aug 12 j 18:18	11° $\overline{12}$ '53	1°37'21				
minimum elong	-4970 Aug 12 j 18:17	11° $\overline{12}$ '53	1°37'37	retrograde	-4962 Dec 09 j 22:27	1° $\overline{02}$ '54	
max. Earth dist.	-4970 Aug 11 j 18:31	11° $\overline{10}$ '39	31.30327 AU				
retrograde	-4970 Nov 22 j 15:01	13° $\overline{39}$ '14		opposition	-4961 Feb 14 j 17:39	30° \overline{R} $\overline{0}$	
opposition	-4969 Feb 08 j 12:48	12° $\overline{17}$ '38	1°45'55	min. Earth dist.	-4961 Feb 26 j 12:25	29° $\overline{41}$ '02	2°11'33
min. Earth dist.	-4969 Feb 09 j 10:29	12° $\overline{16}$ '09	29.30660 AU	direct	-4961 Feb 27 j 06:32	29° $\overline{39}$ '49	29.32374 AU
direct	-4969 May 01 j 00:42	10° $\overline{52}$ '53					
max. Earth dist.	-4969 Aug 14 j 05:39	13° $\overline{21}$ '42	31.30714 AU	direct	-4961 May 18 j 22:50	28° $\overline{16}$ '32	
					-4961 Aug 11 j 08:30	0° $\overline{0}$	
conjunction	-4969 Aug 15 j 04:23	13° $\overline{23}$ '50	1°40'58	conjunction	-4961 Sep 01 j 08:47	0° $\overline{0}$ 46'38	2°04'18
minimum elong	-4969 Aug 15 j 04:22	13° $\overline{23}$ '50	1°41'13	minimum elong	-4961 Sep 01 j 08:47	0° $\overline{0}$ 46'38	2°04'32
retrograde	-4969 Nov 25 j 00:15	15° $\overline{50}$ '11		max. Earth dist.	-4961 Aug 31 j 14:20	0° $\overline{0}$ 44'54	31.32404 AU
opposition	-4968 Feb 11 j 00:45	14° $\overline{28}$ '33	1°49'42	retrograde	-4961 Dec 12 j 10:50	3° $\overline{0}$ 13'14	
min. Earth dist.	-4968 Feb 11 j 23:20	14° $\overline{27}$ '01	29.30979 AU	opposition	-4960 Feb 29 j 00:30	1° $\overline{0}$ 51'24	2°13'57
direct	-4968 May 02 j 13:13	13° $\overline{03}$ '50		min. Earth dist.	-4960 Feb 29 j 17:11	1° $\overline{0}$ 50'17	29.32734 AU
				direct	-4960 May 20 j 11:00	0° $\overline{0}$ 26'59	
conjunction	-4968 Aug 16 j 14:19	15° $\overline{34}$ '39	1°44'27				
minimum elong	-4968 Aug 16 j 14:18	15° $\overline{34}$ '39	1°44'43	conjunction	-4960 Sep 02 j 18:11	2° $\overline{0}$ 57'02	2°06'27
max. Earth dist.	-4968 Aug 15 j 15:11	15° $\overline{32}$ '29	31.30967 AU	minimum elong	-4960 Sep 02 j 18:10	2° $\overline{0}$ 57'02	2°06'42
retrograde	-4968 Nov 26 j 09:30	18° $\overline{00}$ '58		max. Earth dist.	-4960 Sep 02 j 01:09	2° $\overline{0}$ 55'26	31.32732 AU
opposition	-4967 Feb 12 j 12:27	16° $\overline{39}$ '19	1°53'20	retrograde	-4960 Dec 13 j 20:49	5° $\overline{0}$ 23'45	
min. Earth dist.	-4967 Feb 13 j 09:48	16° $\overline{37}$ '52	29.31171 AU	opposition	-4959 Mar 02 j 12:46	4° $\overline{0}$ 01'55	2°16'09
direct	-4967 May 05 j 01:50	15° $\overline{14}$ '35		min. Earth dist.	-4959 Mar 03 j 06:00	4° $\overline{0}$ 00'45	29.33036 AU
max. Earth dist.	-4967 Aug 18 j 01:43	17° $\overline{43}$ '11	31.31103 AU	direct	-4959 May 22 j 22:51	2° $\overline{0}$ 37'35	
				max. Earth dist.	-4959 Sep 04 j 10:33	5° $\overline{0}$ 05'59	31.32995 AU
conjunction	-4967 Aug 19 j 00:13	17° $\overline{45}$ '18	1°47'46				
minimum elong	-4967 Aug 19 j 00:12	17° $\overline{45}$ '18	1°48'01	conjunction	-4959 Sep 05 j 03:27	5° $\overline{0}$ 07'34	2°08'26
retrograde	-4967 Nov 28 j 18:37	20° $\overline{11}$ '37		minimum elong	-4959 Sep 05 j 03:27	5° $\overline{0}$ 07'34	2°08'39
opposition	-4966 Feb 15 j 00:30	18° $\overline{49}$ '54	1°56'48	retrograde	-4959 Dec 16 j 06:52	7° $\overline{0}$ 34'22	
min. Earth dist.	-4966 Feb 15 j 22:22	18° $\overline{48}$ '24	29.31287 AU	opposition	-4958 Mar 05 j 01:06	6° $\overline{0}$ 12'33	2°18'09
direct	-4966 May 07 j 12:46	17° $\overline{25}$ '10		min. Earth dist.	-4958 Mar 05 j 16:44	6° $\overline{0}$ 11'30	29.33247 AU
max. Earth dist.	-4966 Aug 20 j 12:00	19° $\overline{53}$ '41	31.31200 AU	direct	-4958 May 25 j 11:09	4° $\overline{0}$ 48'18	
conjunction	-4966 Aug 21 j 09:46	19° $\overline{55}$ '44	1°50'56	conjunction	-4958 Sep 07 j 12:42	7° $\overline{0}$ 18'12	2°10'13
minimum elong	-4966 Aug 21 j 09:45	19° $\overline{55}$ '44	1°51'12	minimum elong	-4958 Sep 07 j 12:42	7° $\overline{0}$ 18'12	2°10'27
retrograde	-4966 Dec 01 j 04:09	22° $\overline{22}$ '03		max. Earth dist.	-4958 Sep 06 j 20:25	7° $\overline{0}$ 16'40	31.33135 AU
				retrograde	-4958 Dec 18 j 16:49	9° $\overline{0}$ 45'06	

Attention, astronomical year style is used: The year -4957 in astronomical counting style is the year 4958 BCE in historical counting style.

opposition	-4957 Mar 07 j 13:38	8°023'16	2°19'58	opposition	-4949 Mar 25 j 17:35	25°046'31	2°27'11
min. Earth dist.	-4957 Mar 08 j 05:44	8°022'10	29.33331 AU	min. Earth dist.	-4949 Mar 26 j 01:54	25°045'57	29.31504 AU
direct	-4957 May 27 j 21:59	6°059'04		direct	-4949 Jun 14 j 19:03	24°022'35	
conjunction	-4957 Sep 09 j 22:02	9°028'53	2°11'49	conjunction	-4949 Sep 26 j 21:40	26°051'29	2°17'47
minimum elong	-4957 Sep 09 j 22:02	9°028'53	2°12'01	minimum elong	-4949 Sep 26 j 21:40	26°051'29	2°17'56
max. Earth dist.	-4957 Sep 09 j 06:26	9°027'25	31.33145 AU	max. Earth dist.	-4949 Sep 26 j 12:56	26°050'40	31.31302 AU
retrograde	-4957 Dec 21 j 02:43	11°055'52		retrograde	-4948 Jan 07 j 17:25	29°019'12	
opposition	-4956 Mar 09 j 01:52	10°033'59	2°21'35	opposition	-4948 Mar 27 j 06:09	27°056'48	2°27'09
min. Earth dist.	-4956 Mar 09 j 16:45	10°032'59	29.33260 AU	min. Earth dist.	-4948 Mar 27 j 14:28	27°056'15	29.31464 AU
direct	-4956 May 29 j 10:06	9°009'50		direct	-4948 Jun 16 j 06:04	26°032'57	
conjunction	-4956 Sep 11 j 07:17	11°039'33	2°13'14	conjunction	-4948 Sep 28 j 06:34	29°001'47	2°17'39
minimum elong	-4956 Sep 11 j 07:16	11°039'32	2°13'27	minimum elong	-4948 Sep 28 j 06:34	29°001'47	2°17'49
max. Earth dist.	-4956 Sep 10 j 15:30	11°038'03	31.33000 AU	max. Earth dist.	-4948 Sep 27 j 23:12	29°001'05	31.31272 AU
retrograde	-4956 Dec 22 j 13:32	14°006'37			-4948 Oct 24 j 15:28	0°00'00	
opposition	-4955 Mar 11 j 14:26	12°044'40	2°23'00	retrograde	-4947 Jan 09 j 03:41	1°00'29'38	
min. Earth dist.	-4955 Mar 12 j 05:19	12°043'40	29.33058 AU	opposition	-4947 Mar 29 j 18:52	0°00'07'14	2°26'54
direct	-4955 May 31 j 20:35	11°020'33		min. Earth dist.	-4947 Mar 30 j 01:30	0°00'06'47	29.31414 AU
conjunction	-4955 Sep 13 j 16:25	13°050'08	2°14'28		-4947 Apr 03 j 06:25	30°00'00	
minimum elong	-4955 Sep 13 j 16:25	13°050'08	2°14'40	direct	-4947 Jun 18 j 18:17	28°043'29	
max. Earth dist.	-4955 Sep 13 j 02:14	13°048'47	31.32737 AU		-4947 Aug 28 j 08:38	0°00'00	
retrograde	-4955 Oct 15 j 19:27	15°00'00		conjunction	-4947 Sep 30 j 15:19	1°00'12'13	2°17'19
	-4955 Dec 24 j 23:33	16°017'16		minimum elong	-4947 Sep 30 j 15:19	1°00'12'13	2°17'28
	-4954 Mar 11 j 04:28	15°00'00		max. Earth dist.	-4947 Sep 30 j 08:07	1°00'11'32	31.31203 AU
opposition	-4954 Mar 14 j 03:00	14°055'15	2°24'13	retrograde	-4946 Jan 11 j 14:52	3°00'40'14	
min. Earth dist.	-4954 Mar 14 j 17:04	14°054'18	29.32740 AU	opposition	-4946 Apr 01 j 07:47	2°00'17'48	2°26'26
direct	-4954 Jun 03 j 08:26	13°031'08		min. Earth dist.	-4946 Apr 01 j 14:07	2°00'17'23	29.31320 AU
	-4954 Aug 19 j 11:33	15°00'00		direct	-4946 Jun 21 j 04:07	0°00'54'08	
max. Earth dist.	-4954 Sep 15 j 11:00	15°059'13	31.32391 AU	conjunction	-4946 Oct 03 j 00:23	3°00'22'48	2°16'48
conjunction	-4954 Sep 16 j 01:24	16°000'35	2°15'30	minimum elong	-4946 Oct 03 j 00:23	3°00'22'48	2°16'56
minimum elong	-4954 Sep 16 j 01:24	16°000'35	2°15'43	max. Earth dist.	-4946 Oct 02 j 18:56	3°00'22'17	31.31062 AU
retrograde	-4954 Dec 27 j 11:10	18°027'48		retrograde	-4945 Jan 14 j 01:05	5°00'50'58	
opposition	-4953 Mar 16 j 15:25	17°005'41	2°25'14	opposition	-4945 Apr 03 j 20:34	4°00'28'30	2°25'46
min. Earth dist.	-4953 Mar 17 j 04:27	17°004'48	29.32390 AU	min. Earth dist.	-4945 Apr 04 j 02:07	4°00'28'08	29.31117 AU
direct	-4953 Jun 05 j 18:15	15°041'34		direct	-4945 Jun 23 j 15:26	3°00'04'54	
conjunction	-4953 Sep 18 j 10:24	18°010'53	2°16'21	conjunction	-4945 Oct 05 j 09:20	5°00'33'30	2°16'04
minimum elong	-4953 Sep 18 j 10:24	18°010'53	2°16'32	minimum elong	-4945 Oct 05 j 09:20	5°00'33'30	2°16'11
max. Earth dist.	-4953 Sep 17 j 21:56	18°009'43	31.32031 AU	max. Earth dist.	-4945 Oct 05 j 03:27	5°00'32'56	31.30799 AU
retrograde	-4953 Dec 29 j 21:24	20°038'10		retrograde	-4944 Jan 16 j 13:40	8°00'01'49	
opposition	-4952 Mar 18 j 03:58	19°015'58	2°26'02	opposition	-4944 Apr 05 j 09:27	6°00'39'18	2°24'54
min. Earth dist.	-4952 Mar 18 j 16:32	19°015'07	29.32041 AU	min. Earth dist.	-4944 Apr 05 j 14:06	6°00'38'59	29.30785 AU
direct	-4952 Jun 07 j 07:17	17°051'53		direct	-4944 Jun 25 j 01:03	5°00'15'45	
conjunction	-4952 Sep 19 j 19:10	20°021'04	2°17'00	conjunction	-4944 Oct 06 j 18:23	7°00'44'16	2°15'09
minimum elong	-4952 Sep 19 j 19:10	20°021'04	2°17'12	minimum elong	-4944 Oct 06 j 18:24	7°00'44'16	2°15'17
max. Earth dist.	-4952 Sep 19 j 06:49	20°019'54	31.31716 AU	max. Earth dist.	-4944 Oct 06 j 14:06	7°00'43'51	31.30385 AU
retrograde	-4952 Dec 31 j 09:57	22°048'26		retrograde	-4943 Jan 18 j 00:33	10°00'12'43	
opposition	-4951 Mar 20 j 16:23	21°026'09	2°26'38	opposition	-4943 Apr 07 j 22:28	8°00'50'09	2°23'49
min. Earth dist.	-4951 Mar 21 j 03:01	21°025'26	29.31769 AU	min. Earth dist.	-4943 Apr 08 j 02:58	8°00'49'50	29.30290 AU
direct	-4951 Jun 09 j 19:09	20°002'05		direct	-4943 Jun 27 j 13:22	7°00'26'39	
conjunction	-4951 Sep 22 j 04:05	22°031'11	2°17'28	conjunction	-4943 Oct 09 j 03:23	9°00'55'03	2°14'02
minimum elong	-4951 Sep 22 j 04:06	22°031'11	2°17'38	minimum elong	-4943 Oct 09 j 03:24	9°00'55'03	2°14'09
max. Earth dist.	-4951 Sep 21 j 17:34	22°030'11	31.31486 AU	max. Earth dist.	-4943 Oct 08 j 22:56	9°00'54'38	31.29834 AU
retrograde	-4950 Jan 02 j 20:05	24°058'39		retrograde	-4942 Jan 20 j 13:53	12°00'23'38	
opposition	-4950 Mar 23 j 05:04	23°036'19	2°27'01	opposition	-4942 Apr 10 j 11:23	11°00'00'59	2°22'31
min. Earth dist.	-4950 Mar 23 j 15:33	23°035'37	29.31593 AU	min. Earth dist.	-4942 Apr 10 j 14:18	11°00'00'47	29.29671 AU
direct	-4950 Jun 12 j 06:26	22°012'19		direct	-4942 Jun 30 j 00:40	9°00'37'30	
conjunction	-4950 Sep 24 j 12:48	24°041'18	2°17'44	conjunction	-4942 Oct 11 j 12:20	12°00'05'49	2°12'44
minimum elong	-4950 Sep 24 j 12:49	24°041'18	2°17'54	minimum elong	-4942 Oct 11 j 12:20	12°00'05'49	2°12'51
max. Earth dist.	-4950 Sep 24 j 03:08	24°040'23	31.31366 AU	max. Earth dist.	-4942 Oct 11 j 09:14	12°00'05'31	31.29157 AU
retrograde	-4949 Jan 05 j 06:40	27°008'52		retrograde	-4941 Jan 23 j 00:36	14°00'34'32	

Attention, astronomical year style is used: The year -4941 in astronomical counting style is the year 4942 BCE in historical counting style.

opposition	-4941 Apr 13 j 00:24	13° \mathring{M} 11'46	2°21'02			-4933 May 26 j 12:48	30° \mathring{R} \mathring{M}	
min. Earth dist.	-4941 Apr 13 j 03:32	13° \mathring{M} 11'34	29.28950 AU	direct		-4933 Jul 20 j 04:32	29° \mathring{M} 16'11	
direct	-4941 Jul 02 j 11:53	11° \mathring{M} 48'19				-4933 Sep 10 j 04:41	0° \mathring{A}	
conjunction	-4941 Oct 13 j 21:15	14° \mathring{M} 16'31	2°11'15		conjunction	-4933 Oct 30 j 21:02	1° \mathring{A} 43'50	1°52'46
minimum elong	-4941 Oct 13 j 21:15	14° \mathring{M} 16'31	2°11'20		minimum elong	-4933 Oct 30 j 21:03	1° \mathring{A} 43'50	1°52'46
max. Earth dist.	-4941 Oct 13 j 18:56	14° \mathring{M} 16'18	31.28422 AU		max. Earth dist.	-4933 Oct 31 j 02:56	1° \mathring{A} 44'23	31.23838 AU
retrograde	-4940 Jan 25 j 11:45	16° \mathring{M} 45'20			retrograde	-4932 Feb 12 j 07:54	4° \mathring{A} 14'00	
opposition	-4940 Apr 14 j 13:06	15° \mathring{M} 22'30	2°19'21		opposition	-4932 May 02 j 21:06	2° \mathring{A} 50'42	1°58'50
min. Earth dist.	-4940 Apr 14 j 14:13	15° \mathring{M} 22'25	29.28197 AU		min. Earth dist.	-4932 May 02 j 15:15	2° \mathring{A} 51'06	29.23606 AU
direct	-4940 Jul 04 j 00:54	13° \mathring{M} 59'03			direct	-4932 Jul 21 j 14:56	1° \mathring{A} 27'45	
conjunction	-4940 Oct 15 j 06:06	16° \mathring{M} 27'09	2°09'35		conjunction	-4932 Nov 01 j 06:25	3° \mathring{A} 55'20	1°49'40
minimum elong	-4940 Oct 15 j 06:07	16° \mathring{M} 27'10	2°09'40		minimum elong	-4932 Nov 01 j 06:25	3° \mathring{A} 55'20	1°49'41
max. Earth dist.	-4940 Oct 15 j 04:37	16° \mathring{M} 27'01	31.27676 AU		max. Earth dist.	-4932 Nov 01 j 12:57	3° \mathring{A} 55'57	31.23109 AU
retrograde	-4939 Jan 26 j 23:15	18° \mathring{M} 56'07			retrograde	-4931 Feb 13 j 20:55	6° \mathring{A} 25'39	
opposition	-4939 Apr 17 j 02:08	17° \mathring{M} 33'10	2°17'28		opposition	-4931 May 05 j 10:14	5° \mathring{A} 02'17	1°55'26
min. Earth dist.	-4939 Apr 17 j 03:02	17° \mathring{M} 33'07	29.27480 AU		min. Earth dist.	-4931 May 05 j 02:40	5° \mathring{A} 02'47	29.22793 AU
direct	-4939 Jul 06 j 12:25	16° \mathring{M} 09'47			direct	-4931 Jul 24 j 04:00	3° \mathring{A} 39'21	
conjunction	-4939 Oct 17 j 14:55	18° \mathring{M} 37'46	2°07'44		conjunction	-4931 Nov 03 j 15:42	6° \mathring{A} 06'52	1°46'25
minimum elong	-4939 Oct 17 j 14:56	18° \mathring{M} 37'46	2°07'47		minimum elong	-4931 Nov 03 j 15:43	6° \mathring{A} 06'52	1°46'24
max. Earth dist.	-4939 Oct 17 j 15:13	18° \mathring{M} 37'48	31.27000 AU		max. Earth dist.	-4931 Nov 03 j 22:28	6° \mathring{A} 07'30	31.22222 AU
retrograde	-4938 Jan 29 j 09:31	21° \mathring{M} 06'53			retrograde	-4930 Feb 16 j 09:57	8° \mathring{A} 37'20	
opposition	-4938 Apr 19 j 15:04	19° \mathring{M} 43'52	2°15'23		opposition	-4930 May 07 j 23:32	7° \mathring{A} 13'52	1°51'53
min. Earth dist.	-4938 Apr 19 j 13:53	19° \mathring{M} 43'57	29.26834 AU		min. Earth dist.	-4930 May 07 j 16:18	7° \mathring{A} 14'21	29.21833 AU
direct	-4938 Jul 09 j 00:55	18° \mathring{M} 20'31			direct	-4930 Jul 26 j 15:32	5° \mathring{A} 50'57	
conjunction	-4938 Oct 19 j 23:47	20° \mathring{M} 48'26	2°05'41		conjunction	-4930 Nov 06 j 01:14	8° \mathring{A} 18'22	1°43'01
minimum elong	-4938 Oct 19 j 23:47	20° \mathring{M} 48'26	2°05'45		minimum elong	-4930 Nov 06 j 01:14	8° \mathring{A} 18'22	1°43'01
max. Earth dist.	-4938 Oct 20 j 00:24	20° \mathring{M} 48'29	31.26402 AU		max. Earth dist.	-4930 Nov 06 j 09:18	8° \mathring{A} 19'08	31.21206 AU
retrograde	-4937 Jan 31 j 20:30	23° \mathring{M} 17'42			retrograde	-4929 Feb 18 j 20:35	10° \mathring{A} 48'57	
opposition	-4937 Apr 22 j 03:55	21° \mathring{M} 54'38	2°13'06		opposition	-4929 May 10 j 12:25	9° \mathring{A} 25'23	1°48'10
min. Earth dist.	-4937 Apr 22 j 02:07	21° \mathring{M} 54'45	29.26283 AU		min. Earth dist.	-4929 May 10 j 03:42	9° \mathring{A} 25'58	29.20744 AU
direct	-4937 Jul 11 j 10:40	20° \mathring{M} 31'20			direct	-4929 Jul 29 j 04:20	8° \mathring{A} 02'27	
conjunction	-4937 Oct 22 j 08:47	22° \mathring{M} 59'12	2°03'27		conjunction	-4929 Nov 08 j 10:32	10° \mathring{A} 29'47	1°39'28
minimum elong	-4937 Oct 22 j 08:48	22° \mathring{M} 59'12	2°03'30		minimum elong	-4929 Nov 08 j 10:33	10° \mathring{A} 29'47	1°39'26
max. Earth dist.	-4937 Oct 22 j 11:33	22° \mathring{M} 59'27	31.25889 AU		max. Earth dist.	-4929 Nov 08 j 18:27	10° \mathring{A} 30'32	31.20084 AU
retrograde	-4936 Feb 03 j 06:29	25° \mathring{M} 28'38			retrograde	-4928 Feb 21 j 08:08	13° \mathring{A} 00'30	
opposition	-4936 Apr 23 j 16:51	24° \mathring{M} 05'31	2°10'38		opposition	-4928 May 12 j 01:32	11° \mathring{A} 36'48	1°44'18
min. Earth dist.	-4936 Apr 23 j 13:48	24° \mathring{M} 05'44	29.25783 AU		min. Earth dist.	-4928 May 11 j 16:33	11° \mathring{A} 37'24	29.19598 AU
direct	-4936 Jul 12 j 21:49	22° \mathring{M} 42'18			direct	-4928 Jul 30 j 15:05	10° \mathring{A} 13'52	
conjunction	-4936 Oct 23 j 17:35	25° \mathring{M} 10'06	2°01'03		conjunction	-4928 Nov 09 j 19:52	12° \mathring{A} 41'06	1°35'46
minimum elong	-4936 Oct 23 j 17:35	25° \mathring{M} 10'06	2°01'06		minimum elong	-4928 Nov 09 j 19:53	12° \mathring{A} 41'06	1°35'45
max. Earth dist.	-4936 Oct 23 j 20:24	25° \mathring{M} 10'22	31.25419 AU		max. Earth dist.	-4928 Nov 10 j 05:52	12° \mathring{A} 42'03	31.18930 AU
retrograde	-4935 Feb 04 j 19:28	27° \mathring{M} 39'43			retrograde	-4927 Feb 22 j 18:08	15° \mathring{A} 11'56	
opposition	-4935 Apr 26 j 05:52	26° \mathring{M} 16'35	2°07'57		opposition	-4927 May 14 j 14:33	13° \mathring{A} 48'08	1°40'17
min. Earth dist.	-4935 Apr 26 j 01:34	26° \mathring{M} 16'52	29.25320 AU		min. Earth dist.	-4927 May 14 j 04:23	13° \mathring{A} 48'49	29.18445 AU
direct	-4935 Jul 15 j 07:16	24° \mathring{M} 53'26			direct	-4927 Aug 02 j 03:23	12° \mathring{A} 25'11	
conjunction	-4935 Oct 26 j 02:42	27° \mathring{M} 21'11	1°58'28		conjunction	-4927 Nov 12 j 05:10	14° \mathring{A} 52'20	1°31'57
minimum elong	-4935 Oct 26 j 02:43	27° \mathring{M} 21'11	1°58'29		minimum elong	-4927 Nov 12 j 05:11	14° \mathring{A} 52'20	1°31'53
max. Earth dist.	-4935 Oct 26 j 07:24	27° \mathring{M} 21'37	31.24952 AU		max. Earth dist.	-4927 Nov 12 j 15:13	14° \mathring{A} 53'17	31.17816 AU
retrograde	-4934 Feb 07 j 06:37	29° \mathring{M} 51'00			retrograde	-4926 Feb 25 j 06:54	17° \mathring{A} 23'19	
opposition	-4934 Apr 28 j 18:58	28° \mathring{M} 27'48	2°05'06		opposition	-4926 May 17 j 03:27	15° \mathring{A} 59'25	1°36'07
min. Earth dist.	-4934 Apr 28 j 14:18	28° \mathring{M} 28'07	29.24832 AU		min. Earth dist.	-4926 May 16 j 16:02	16° \mathring{A} 00'11	29.17372 AU
direct	-4934 Jul 17 j 18:28	27° \mathring{M} 04'45			direct	-4926 Aug 04 j 13:14	14° \mathring{A} 36'28	
conjunction	-4934 Oct 28 j 11:45	29° \mathring{M} 32'26	1°55'42		conjunction	-4926 Nov 14 j 14:40	17° \mathring{A} 03'34	1°27'59
minimum elong	-4934 Oct 28 j 11:46	29° \mathring{M} 32'26	1°55'44		minimum elong	-4926 Nov 14 j 14:41	17° \mathring{A} 03'34	1°27'56
max. Earth dist.	-4934 Oct 28 j 16:34	29° \mathring{M} 32'53	31.24449 AU		max. Earth dist.	-4926 Nov 15 j 02:35	17° \mathring{A} 04'42	31.16782 AU
retrograde	-4934 Nov 09 j 16:20	0° \mathring{A}			retrograde	-4925 Feb 27 j 17:25	19° \mathring{A} 34'43	
opposition	-4933 Feb 09 j 20:23	2° \mathring{A} 02'25			opposition	-4925 May 19 j 16:23	18° \mathring{A} 10'43	1°31'48
min. Earth dist.	-4933 May 01 j 07:59	0° \mathring{A} 39'11	2°02'03		min. Earth dist.	-4925 May 19 j 04:22	18° \mathring{A} 11'32	29.16379 AU
direct	-4933 May 01 j 01:45	0° \mathring{A} 39'37	29.24281 AU		direct	-4925 Aug 07 j 00:15	16° \mathring{A} 47'49	

Attention, astronomical year style is used: The year -4925 in astronomical counting style is the year 4926 BCE in historical counting style.

conjunction	-4925 Nov 17 j 00:04	19° <u>♂</u> 14'52	1°23'53	direct	-4917 Aug 24 j 16:23	4° <u>♂</u> 24'38	
minimum elong	-4925 Nov 17 j 00:05	19° <u>♂</u> 14'52	1°23'48				
max. Earth dist.	-4925 Nov 17 j 12:25	19° <u>♂</u> 16'02	31.15851 AU	conjunction	-4917 Dec 04 j 07:39	6° <u>♂</u> 51'38	0°47'06
retrograde	-4924 Mar 01 j 06:47	21° <u>♂</u> 46'11		minimum elong	-4917 Dec 04 j 07:39	6° <u>♂</u> 51'38	0°46'57
opposition	-4924 May 21 j 05:09	20° <u>♂</u> 22'08	1°27'21	max. Earth dist.	-4917 Dec 05 j 01:58	6° <u>♂</u> 53'22	31.08558 AU
min. Earth dist.	-4924 May 20 j 15:17	20° <u>♂</u> 23'05	29.15488 AU	retrograde	-4916 Mar 19 j 10:01	9° <u>♂</u> 24'17	
direct	-4924 Aug 08 j 09:49	18° <u>♂</u> 59'16		opposition	-4916 Jun 08 j 12:42	7° <u>♂</u> 59'47	0°47'37
				min. Earth dist.	-4916 Jun 07 j 18:47	8° <u>♂</u> 01'01	29.07976 AU
conjunction	-4924 Nov 18 j 09:38	21° <u>♂</u> 26'19	1°19'40	direct	-4916 Aug 26 j 03:48	6° <u>♂</u> 37'08	
minimum elong	-4924 Nov 18 j 09:38	21° <u>♂</u> 26'19	1°19'36				
max. Earth dist.	-4924 Nov 18 j 23:18	21° <u>♂</u> 27'36	31.15004 AU	conjunction	-4916 Dec 05 j 17:55	9° <u>♂</u> 04'05	0°42'07
retrograde	-4923 Mar 03 j 18:46	23° <u>♂</u> 57'49		minimum elong	-4916 Dec 05 j 17:55	9° <u>♂</u> 04'05	0°41'58
opposition	-4923 May 23 j 18:13	22° <u>♂</u> 33'43	1°22'47	max. Earth dist.	-4916 Dec 06 j 12:23	9° <u>♂</u> 05'50	31.07333 AU
min. Earth dist.	-4923 May 23 j 04:22	22° <u>♂</u> 34'40	29.14675 AU	retrograde	-4915 Mar 21 j 23:13	11° <u>♂</u> 36'51	
direct	-4923 Aug 10 j 19:35	21° <u>♂</u> 10'55		min. Earth dist.	-4915 Jun 10 j 06:06	10° <u>♂</u> 13'34	29.06753 AU
				opposition	-4915 Jun 11 j 01:28	10° <u>♂</u> 12'14	0°42'15
conjunction	-4923 Nov 20 j 19:14	23° <u>♂</u> 37'57	1°15'19	direct	-4915 Aug 28 j 13:42	8° <u>♂</u> 49'32	
minimum elong	-4923 Nov 20 j 19:15	23° <u>♂</u> 37'57	1°15'13				
max. Earth dist.	-4923 Nov 21 j 10:03	23° <u>♂</u> 39'21	31.14232 AU	conjunction	-4915 Dec 08 j 04:13	11° <u>♂</u> 16'28	0°37'04
retrograde	-4922 Mar 06 j 08:38	26° <u>♂</u> 09'39		minimum elong	-4915 Dec 08 j 04:13	11° <u>♂</u> 16'28	0°36'54
opposition	-4922 May 26 j 07:06	24° <u>♂</u> 45'31	1°18'04	max. Earth dist.	-4915 Dec 08 j 23:39	11° <u>♂</u> 18'18	31.06123 AU
min. Earth dist.	-4922 May 25 j 15:24	24° <u>♂</u> 46'35	29.13907 AU	retrograde	-4914 Mar 24 j 10:43	13° <u>♂</u> 49'21	
direct	-4922 Aug 13 j 07:50	23° <u>♂</u> 22'46		opposition	-4914 Jun 13 j 14:16	12° <u>♂</u> 24'38	0°36'49
				min. Earth dist.	-4914 Jun 12 j 19:10	12° <u>♂</u> 25'57	29.05580 AU
conjunction	-4922 Nov 23 j 05:00	25° <u>♂</u> 49'49	1°10'52	direct	-4914 Aug 30 j 23:52	11° <u>♂</u> 01'54	
minimum elong	-4922 Nov 23 j 05:01	25° <u>♂</u> 49'49	1°10'46				
max. Earth dist.	-4922 Nov 23 j 20:04	25° <u>♂</u> 51'14	31.13466 AU	conjunction	-4914 Dec 10 j 14:43	13° <u>♂</u> 28'48	0°31'58
retrograde	-4921 Mar 08 j 22:39	28° <u>♂</u> 21'42		minimum elong	-4914 Dec 10 j 14:43	13° <u>♂</u> 28'48	0°31'49
opposition	-4921 May 28 j 19:59	26° <u>♂</u> 57'32	1°13'15	max. Earth dist.	-4914 Dec 11 j 11:11	13° <u>♂</u> 30'44	31.05002 AU
min. Earth dist.	-4921 May 28 j 04:39	26° <u>♂</u> 58'34	29.13136 AU				
direct	-4921 Aug 15 j 18:21	25° <u>♂</u> 34'50		retrograde	-4913 Jan 22 j 15:21	15° <u>♂</u>	
					-4913 Mar 27 j 00:09	16° <u>♂</u> 01'47	
conjunction	-4921 Nov 25 j 15:01	28° <u>♂</u> 01'54	1°06'18	min. Earth dist.	-4913 Jun 01 j 22:39	15° <u>♂</u>	
minimum elong	-4921 Nov 25 j 15:01	28° <u>♂</u> 01'54	1°06'10	opposition	-4913 Jun 15 j 05:51	14° <u>♂</u> 38'26	29.04508 AU
max. Earth dist.	-4921 Nov 26 j 07:30	28° <u>♂</u> 03'27	31.12681 AU	direct	-4913 Jun 16 j 02:42	14° <u>♂</u> 37'00	0°31'20
	-4920 Jan 24 j 04:39	0° <u>♂</u>			-4913 Sep 02 j 11:44	13° <u>♂</u> 14'15	
retrograde	-4920 Mar 10 j 10:28	0° <u>♂</u> 33'58			-4913 Nov 24 j 16:42	15° <u>♂</u>	
	-4920 Apr 27 j 08:28	30° <u>♂</u>		conjunction	-4913 Dec 13 j 01:08	15° <u>♂</u> 41'09	0°26'49
opposition	-4920 May 30 j 08:54	29° <u>♂</u> 09'46	1°08'18	minimum elong	-4913 Dec 13 j 01:08	15° <u>♂</u> 41'09	0°26'38
min. Earth dist.	-4920 May 29 j 16:08	29° <u>♂</u> 10'55	29.12307 AU	max. Earth dist.	-4913 Dec 13 j 21:49	15° <u>♂</u> 43'06	31.03984 AU
direct	-4920 Aug 17 j 06:34	27° <u>♂</u> 47'07		retrograde	-4912 Mar 28 j 13:38	18° <u>♂</u> 14'17	
	-4920 Nov 20 j 19:08	0° <u>♂</u>		opposition	-4912 Jun 17 j 15:26	16° <u>♂</u> 49'25	0°25'48
conjunction	-4920 Nov 27 j 00:52	0° <u>♂</u> 14'11	1°01'37	min. Earth dist.	-4912 Jun 16 j 18:45	16° <u>♂</u> 50'50	29.03558 AU
minimum elong	-4920 Nov 27 j 00:53	0° <u>♂</u> 14'11	1°01'31	direct	-4912 Sep 03 j 21:31	15° <u>♂</u> 26'40	
max. Earth dist.	-4920 Nov 27 j 16:58	0° <u>♂</u> 15'42	31.11814 AU				
retrograde	-4919 Mar 12 j 23:35	2° <u>♂</u> 46'26		conjunction	-4912 Dec 14 j 11:39	17° <u>♂</u> 53'35	0°21'38
opposition	-4919 Jun 01 j 22:01	1° <u>♂</u> 22'11	1°03'16	minimum elong	-4912 Dec 14 j 11:39	17° <u>♂</u> 53'35	0°21'28
min. Earth dist.	-4919 Jun 01 j 05:18	1° <u>♂</u> 23'19	29.11394 AU	max. Earth dist.	-4912 Dec 15 j 10:00	17° <u>♂</u> 55'41	31.03099 AU
	-4919 Aug 14 j 16:03	30° <u>♂</u>		retrograde	-4911 Mar 31 j 02:12	20° <u>♂</u> 26'50	
direct	-4919 Aug 19 j 17:23	29° <u>♂</u> 59'34		min. Earth dist.	-4911 Jun 19 j 05:44	19° <u>♂</u> 03'28	29.02719 AU
	-4919 Aug 24 j 17:30	0° <u>♂</u>		opposition	-4911 Jun 20 j 04:01	19° <u>♂</u> 01'56	0°20'14
				direct	-4911 Sep 06 j 09:40	17° <u>♂</u> 39'12	
conjunction	-4919 Nov 29 j 11:11	2° <u>♂</u> 26'37	0°56'52				
minimum elong	-4919 Nov 29 j 11:11	2° <u>♂</u> 26'37	0°56'44	conjunction	-4911 Dec 16 j 22:18	20° <u>♂</u> 06'08	0°16'24
max. Earth dist.	-4919 Nov 30 j 04:48	2° <u>♂</u> 28'17	31.10843 AU	minimum elong	-4911 Dec 16 j 22:18	20° <u>♂</u> 06'08	0°16'12
retrograde	-4918 Mar 15 j 11:06	4° <u>♂</u> 59'01		max. Earth dist.	-4911 Dec 17 j 20:22	20° <u>♂</u> 08'13	31.02313 AU
opposition	-4918 Jun 04 j 10:55	3° <u>♂</u> 34'42	0°58'08	retrograde	-4910 Apr 02 j 16:33	22° <u>♂</u> 39'32	
min. Earth dist.	-4918 Jun 03 j 17:37	3° <u>♂</u> 35'53	29.10353 AU	opposition	-4910 Jun 22 j 16:34	21° <u>♂</u> 14'36	0°14'36
direct	-4918 Aug 22 j 05:58	2° <u>♂</u> 12'06		min. Earth dist.	-4910 Jun 21 j 18:20	21° <u>♂</u> 16'07	29.01981 AU
				direct	-4910 Sep 08 j 20:16	19° <u>♂</u> 51'53	
conjunction	-4918 Dec 01 j 21:23	4° <u>♂</u> 39'08	0°52'01				
minimum elong	-4918 Dec 01 j 21:23	4° <u>♂</u> 39'08	0°51'54	conjunction	-4910 Dec 19 j 09:14	22° <u>♂</u> 18'53	0°11'08
max. Earth dist.	-4918 Dec 02 j 14:24	4° <u>♂</u> 40'44	31.09754 AU	minimum elong	-4910 Dec 19 j 09:14	22° <u>♂</u> 18'53	0°10'57
retrograde	-4917 Mar 18 j 00:11	7° <u>♂</u> 11'40		behind sun begin	-4910 Dec 19 j 04:21	22° <u>♂</u> 18'26	
opposition	-4917 Jun 06 j 23:51	5° <u>♂</u> 47'16	0°52'55	behind sun end	-4910 Dec 19 j 14:08	22° <u>♂</u> 19'19	
min. Earth dist.	-4917 Jun 06 j 06:00	5° <u>♂</u> 48'29	29.09207 AU	max. Earth dist.	-4910 Dec 20 j 08:58	22° <u>♂</u> 21'07	31.01601 AU
				retrograde	-4909 Apr 05 j 05:05	24° <u>♂</u> 52'25	

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Attention, astronomical year style is used: The year -4909 in astronomical counting style is the year 4910 BCE in historical counting style.

min. Earth dist.	-4909 Jun 24 j 06:15	23° \mathbb{M} 29'02	29.01280 AU	minimum elong	-4902 Jan 03 j 17:11	7° \mathbb{Z} 52'49	0°26'11
opposition	-4909 Jun 25 j 05:06	23° \mathbb{M} 27'28	0°08'58	max. Earth dist.	-4902 Jan 04 j 18:13	7° \mathbb{Z} 55'10	30.95298 AU
direct	-4909 Sep 11 j 08:43	22° \mathbb{M} 04'47		retrograde	-4902 Apr 20 j 23:37	10° \mathbb{Z} 27'07	
				opposition	-4902 Jul 10 j 20:38	9° \mathbb{Z} 01'53	0°-30'-33
conjunction	-4909 Dec 21 j 20:05	24° \mathbb{M} 31'50	0°05'52	min. Earth dist.	-4902 Jul 09 j 20:41	9° \mathbb{Z} 03'32	28.94797 AU
minimum elong	-4909 Dec 21 j 20:06	24° \mathbb{M} 31'50	0°05'39	direct	-4902 Sep 26 j 12:44	7° \mathbb{Z} 39'04	
behind sun begin	-4909 Dec 21 j 13:54	24° \mathbb{M} 31'16					
behind sun end	-4909 Dec 22 j 02:17	24° \mathbb{M} 32'24		conjunction	-4901 Jan 06 j 04:53	10° \mathbb{Z} 06'26	0°-31'-7
max. Earth dist.	-4909 Dec 22 j 19:19	24° \mathbb{M} 34'01	31.00912 AU	minimum elong	-4901 Jan 06 j 04:53	10° \mathbb{Z} 06'26	0°31'22
retrograde	-4908 Apr 06 j 18:46	27° \mathbb{M} 05'31		max. Earth dist.	-4901 Jan 07 j 05:11	10° \mathbb{Z} 08'43	30.94247 AU
opposition	-4908 Jun 26 j 17:43	25° \mathbb{M} 40'34	0°03'18	retrograde	-4901 Apr 23 j 14:28	12° \mathbb{Z} 40'48	
min. Earth dist.	-4908 Jun 25 j 18:29	25° \mathbb{M} 42'10	29.00588 AU	min. Earth dist.	-4901 Jul 12 j 09:19	11° \mathbb{Z} 17'09	28.93799 AU
direct	-4908 Sep 12 j 18:53	24° \mathbb{M} 17'55		opposition	-4901 Jul 13 j 08:57	11° \mathbb{Z} 15'30	0°-36'-6
				direct	-4901 Sep 28 j 23:53	9° \mathbb{Z} 52'38	
conjunction	-4908 Dec 23 j 07:21	26° \mathbb{M} 45'01	0°00'31				
minimum elong	-4908 Dec 23 j 07:21	26° \mathbb{M} 45'01	0°00'19	conjunction	-4900 Jan 08 j 16:40	12° \mathbb{Z} 20'04	0°-36'-16
behind sun begin	-4908 Dec 23 j 00:56	26° \mathbb{M} 44'26		minimum elong	-4900 Jan 08 j 16:40	12° \mathbb{Z} 20'04	0°36'32
behind sun end	-4908 Dec 23 j 13:46	26° \mathbb{M} 45'35		max. Earth dist.	-4900 Jan 09 j 18:32	12° \mathbb{Z} 22'30	30.93289 AU
max. Earth dist.	-4908 Dec 24 j 07:36	26° \mathbb{M} 47'18	31.00190 AU	retrograde	-4900 Apr 25 j 03:15	14° \mathbb{Z} 54'31	
desc. node	-4907 Jan 26 j 23:14	28° \mathbb{M} 00'19		opposition	-4900 Jul 14 j 21:09	13° \mathbb{Z} 29'10	0°-41'-35
retrograde	-4907 Apr 09 j 06:01	29° \mathbb{M} 18'51		min. Earth dist.	-4900 Jul 13 j 20:53	13° \mathbb{Z} 30'51	28.92900 AU
min. Earth dist.	-4907 Jun 28 j 07:25	27° \mathbb{M} 55'27	28.99836 AU	direct	-4900 Sep 30 j 12:48	12° \mathbb{Z} 06'17	
opposition	-4907 Jun 29 j 06:21	27° \mathbb{M} 53'52	0°-2'-22				
direct	-4907 Sep 15 j 06:12	26° \mathbb{M} 31'15					
conjunction	-4907 Dec 25 j 18:43	28° \mathbb{M} 58'24	0°-4'-52				
minimum elong	-4907 Dec 25 j 18:43	28° \mathbb{M} 58'24	0°05'07				
behind sun begin	-4907 Dec 25 j 12:27	28° \mathbb{M} 57'50					
behind sun end	-4907 Dec 26 j 01:00	28° \mathbb{M} 58'58					
max. Earth dist.	-4907 Dec 26 j 18:35	29° \mathbb{M} 00'39	30.99403 AU				
	-4906 Jan 22 j 16:43	0° \mathbb{Z}					
retrograde	-4906 Apr 11 j 20:20	1° \mathbb{Z} 32'21					
opposition	-4906 Jul 01 j 18:57	0° \mathbb{Z} 07'22	0°-8'-3				
min. Earth dist.	-4906 Jun 30 j 19:13	0° \mathbb{Z} 09'00	28.98994 AU				
	-4906 Jul 06 j 06:00	30° \mathbb{R} \mathbb{M}					
direct	-4906 Sep 17 j 16:26	28° \mathbb{M} 44'43					
	-4906 Nov 25 j 04:37	0° \mathbb{Z}					
conjunction	-4906 Dec 28 j 06:18	1° \mathbb{Z} 11'56	0°-10'-9				
minimum elong	-4906 Dec 28 j 06:17	1° \mathbb{Z} 11'56	0°10'22				
behind sun begin	-4906 Dec 28 j 01:11	1° \mathbb{Z} 11'28					
behind sun end	-4906 Dec 28 j 11:24	1° \mathbb{Z} 12'24					
max. Earth dist.	-4906 Dec 29 j 06:16	1° \mathbb{Z} 14'11	30.98490 AU				
retrograde	-4905 Apr 14 j 07:54	3° \mathbb{Z} 46'00					
min. Earth dist.	-4905 Jul 03 j 08:45	2° \mathbb{Z} 22'32	28.98027 AU				
opposition	-4905 Jul 04 j 07:29	2° \mathbb{Z} 20'58	0°-13'-43				
direct	-4905 Sep 20 j 02:40	0° \mathbb{Z} 58'18					
conjunction	-4905 Dec 30 j 17:55	3° \mathbb{Z} 25'33	0°-15'-25				
minimum elong	-4905 Dec 30 j 17:55	3° \mathbb{Z} 25'33	0°15'40				
behind sun begin	-4905 Dec 30 j 16:26	3° \mathbb{Z} 25'25					
behind sun end	-4905 Dec 30 j 19:24	3° \mathbb{Z} 25'41					
max. Earth dist.	-4905 Dec 31 j 18:15	3° \mathbb{Z} 27'50	30.97481 AU				
retrograde	-4904 Apr 15 j 21:26	5° \mathbb{Z} 59'42					
opposition	-4904 Jul 05 j 19:57	4° \mathbb{Z} 34'37	0°-19'-22				
min. Earth dist.	-4904 Jul 04 j 20:10	4° \mathbb{Z} 36'15	28.96971 AU				
direct	-4904 Sep 21 j 14:34	3° \mathbb{Z} 11'54					
conjunction	-4903 Jan 01 j 05:23	5° \mathbb{Z} 39'11	0°-20'-41				
minimum elong	-4903 Jan 01 j 05:22	5° \mathbb{Z} 39'11	0°20'55				
max. Earth dist.	-4903 Jan 02 j 05:17	5° \mathbb{Z} 41'26	30.96392 AU				
retrograde	-4903 Apr 18 j 10:33	8° \mathbb{Z} 13'26					
min. Earth dist.	-4903 Jul 07 j 09:37	6° \mathbb{Z} 49'50	28.95875 AU				
opposition	-4903 Jul 08 j 08:31	6° \mathbb{Z} 48'15	0°-24'-59				
direct	-4903 Sep 24 j 00:24	5° \mathbb{Z} 25'29					
conjunction	-4902 Jan 03 j 17:11	7° \mathbb{Z} 52'49	0°-25'-55				

Attention, astronomical year style is used: The year -4900 in astronomical counting style is the year 4901 BCE in historical counting style.

conjunction	-4900 Jan 08 j 16:40	12° \mathring{A} 20'04	0°-36'-16		-4892 Jan 20 j 16:06	0° \mathring{B}	
minimum elong	-4900 Jan 08 j 16:40	12° \mathring{A} 20'04	0°36'32				
max. Earth dist.	-4900 Jan 09 j 18:32	12° \mathring{A} 22'30	30.93289 AU	conjunction	-4892 Jan 26 j 20:04	0° \mathring{B} 13'56	-1°-15'-2
retrograde	-4900 Apr 25 j 03:15	14° \mathring{A} 54'31		minimum elong	-4892 Jan 26 j 20:04	0° \mathring{B} 13'56	1°15'19
opposition	-4900 Jul 14 j 21:09	13° \mathring{A} 29'10	0°-41'-35	max. Earth dist.	-4892 Jan 27 j 20:32	0° \mathring{B} 16'14	30.88089 AU
min. Earth dist.	-4900 Jul 13 j 20:53	13° \mathring{A} 30'51	28.92900 AU	retrograde	-4892 May 13 j 13:12	2° \mathring{B} 48'55	
direct	-4900 Sep 30 j 12:48	12° \mathring{A} 06'17		opposition	-4892 Aug 01 j 21:48	1° \mathring{B} 23'30	-1°-22'-40
				min. Earth dist.	-4892 Jul 31 j 22:54	1° \mathring{B} 25'06	28.87761 AU
				direct	-4892 Oct 18 j 04:04	0° \mathring{B} 00'24	
conjunction	-4899 Jan 10 j 04:32	14° \mathring{A} 33'46	0°-41'-22				
minimum elong	-4899 Jan 10 j 04:31	14° \mathring{A} 33'46	0°41'37	conjunction	-4891 Jan 28 j 09:12	2° \mathring{B} 28'36	-1°-19'-27
max. Earth dist.	-4899 Jan 11 j 05:47	14° \mathring{A} 36'09	30.92457 AU	minimum elong	-4891 Jan 28 j 09:12	2° \mathring{B} 28'36	1°19'43
retrograde	-4899 Apr 27 j 17:10	17° \mathring{A} 08'18		max. Earth dist.	-4891 Jan 29 j 10:26	2° \mathring{B} 30'58	30.87246 AU
min. Earth dist.	-4899 Jul 16 j 08:42	15° \mathring{A} 44'38	28.92141 AU	retrograde	-4891 May 16 j 01:54	5° \mathring{B} 03'34	
opposition	-4899 Jul 17 j 09:18	15° \mathring{A} 42'56	0°-47'00	min. Earth dist.	-4891 Aug 03 j 10:51	3° \mathring{B} 39'42	28.86891 AU
direct	-4899 Oct 02 j 23:07	14° \mathring{A} 20'01		opposition	-4891 Aug 04 j 09:36	3° \mathring{B} 38'07	-1°-27'-20
				direct	-4891 Oct 20 j 17:03	2° \mathring{B} 14'55	
conjunction	-4898 Jan 12 j 16:38	16° \mathring{A} 47'35	0°-46'-25				
minimum elong	-4898 Jan 12 j 16:38	16° \mathring{A} 47'35	0°46'41	conjunction	-4890 Jan 30 j 22:15	4° \mathring{B} 43'11	-1°-23'-45
max. Earth dist.	-4898 Jan 13 j 18:57	16° \mathring{A} 50'04	30.91743 AU	minimum elong	-4890 Jan 30 j 22:15	4° \mathring{B} 43'11	1°24'02
retrograde	-4898 Apr 30 j 05:16	19° \mathring{A} 22'12		max. Earth dist.	-4890 Jan 31 j 22:09	4° \mathring{B} 45'25	30.86368 AU
opposition	-4898 Jul 19 j 21:29	17° \mathring{A} 56'49	0°-52'-22	retrograde	-4890 May 18 j 16:23	7° \mathring{B} 18'08	
min. Earth dist.	-4898 Jul 18 j 21:05	17° \mathring{A} 58'31	28.91482 AU	opposition	-4890 Aug 06 j 21:25	5° \mathring{B} 52'38	-1°-31'-52
direct	-4898 Oct 05 j 11:07	16° \mathring{A} 33'54		min. Earth dist.	-4890 Aug 05 j 22:58	5° \mathring{B} 54'12	28.86026 AU
				direct	-4890 Oct 23 j 04:10	4° \mathring{B} 29'20	
conjunction	-4897 Jan 15 j 04:48	19° \mathring{A} 01'33	0°-51'-23				
minimum elong	-4897 Jan 15 j 04:48	19° \mathring{A} 01'33	0°51'39	conjunction	-4889 Feb 02 j 11:23	6° \mathring{B} 57'40	-1°-27'-55
max. Earth dist.	-4897 Jan 16 j 06:47	19° \mathring{A} 04'00	30.91137 AU	minimum elong	-4889 Feb 02 j 11:23	6° \mathring{B} 57'40	1°28'12
retrograde	-4897 May 02 j 20:11	21° \mathring{A} 36'15		max. Earth dist.	-4889 Feb 03 j 11:55	6° \mathring{B} 59'59	30.85503 AU
min. Earth dist.	-4897 Jul 21 j 08:15	20° \mathring{A} 12'38	28.90917 AU	retrograde	-4889 May 21 j 04:58	9° \mathring{B} 32'36	
opposition	-4897 Jul 22 j 09:26	20° \mathring{A} 10'53	0°-57'-39	min. Earth dist.	-4889 Aug 08 j 11:11	8° \mathring{B} 08'35	28.85202 AU
direct	-4897 Oct 07 j 21:45	18° \mathring{A} 47'58		opposition	-4889 Aug 09 j 09:04	8° \mathring{B} 07'03	-1°-36'-15
				direct	-4889 Oct 25 j 16:57	6° \mathring{B} 43'41	
conjunction	-4896 Jan 17 j 17:07	21° \mathring{A} 15'43	0°-56'-18				
minimum elong	-4896 Jan 17 j 17:07	21° \mathring{A} 15'43	0°56'35	conjunction	-4888 Feb 05 j 00:30	9° \mathring{B} 12'06	-1°-31'-57
max. Earth dist.	-4896 Jan 18 j 19:23	21° \mathring{A} 18'11	30.90589 AU	minimum elong	-4888 Feb 05 j 00:30	9° \mathring{B} 12'06	1°32'15
retrograde	-4896 May 04 j 07:17	23° \mathring{A} 50'30		max. Earth dist.	-4888 Feb 06 j 00:21	9° \mathring{B} 14'21	30.84734 AU
opposition	-4896 Jul 23 j 21:38	22° \mathring{A} 25'08	-1°-2'-51	retrograde	-4888 May 22 j 19:34	11° \mathring{B} 47'01	
min. Earth dist.	-4896 Jul 22 j 21:26	22° \mathring{A} 26'50	28.90393 AU	opposition	-4888 Aug 10 j 20:39	10° \mathring{B} 21'27	-1°-40'-30
direct	-4896 Oct 09 j 07:57	21° \mathring{A} 02'13		min. Earth dist.	-4888 Aug 09 j 22:09	10° \mathring{B} 23'02	28.84500 AU
				direct	-4888 Oct 27 j 04:30	8° \mathring{B} 58'00	
conjunction	-4895 Jan 19 j 05:36	23° \mathring{A} 30'04	-1°-1'-7				
minimum elong	-4895 Jan 19 j 05:35	23° \mathring{A} 30'03	1°01'23	conjunction	-4887 Feb 06 j 13:40	11° \mathring{B} 26'31	-1°-35'-51
max. Earth dist.	-4895 Jan 20 j 08:05	23° \mathring{A} 32'33	30.90071 AU	minimum elong	-4887 Feb 06 j 13:40	11° \mathring{B} 26'31	1°36'07
retrograde	-4895 May 06 j 20:37	26° \mathring{A} 04'55		max. Earth dist.	-4887 Feb 07 j 13:40	11° \mathring{B} 28'46	30.84080 AU
min. Earth dist.	-4895 Jul 25 j 08:45	24° \mathring{A} 41'19	28.89862 AU	retrograde	-4887 May 25 j 06:51	14° \mathring{B} 01'26	
opposition	-4895 Jul 26 j 09:39	24° \mathring{A} 39'35	-1°-7'-58	min. Earth dist.	-4887 Aug 12 j 10:50	12° \mathring{B} 37'22	28.83926 AU
direct	-4895 Oct 11 j 19:14	23° \mathring{A} 16'38		opposition	-4887 Aug 13 j 08:18	12° \mathring{B} 35'51	-1°-44'-35
				direct	-4887 Oct 29 j 15:15	11° \mathring{B} 12'22	
conjunction	-4894 Jan 21 j 18:19	25° \mathring{A} 44'35	-1°-5'-52				
minimum elong	-4894 Jan 21 j 18:18	25° \mathring{A} 44'35	1°06'08	conjunction	-4886 Feb 09 j 03:05	13° \mathring{B} 40'59	-1°-39'-36
max. Earth dist.	-4894 Jan 22 j 19:53	25° \mathring{A} 47'00	30.89500 AU	minimum elong	-4886 Feb 09 j 03:04	13° \mathring{B} 40'58	1°39'53
retrograde	-4894 May 09 j 09:36	28° \mathring{A} 19'31		max. Earth dist.	-4886 Feb 10 j 03:08	13° \mathring{B} 43'14	30.83581 AU
opposition	-4894 Jul 28 j 21:41	26° \mathring{A} 54'10	-1°-12'-59	retrograde	-4886 May 27 j 20:17	16° \mathring{B} 15'54	
min. Earth dist.	-4894 Jul 27 j 22:14	26° \mathring{A} 55'48	28.89265 AU	opposition	-4886 Aug 15 j 19:38	14° \mathring{B} 50'20	-1°-48'-31
direct	-4894 Oct 14 j 04:19	25° \mathring{A} 31'11		min. Earth dist.	-4886 Aug 14 j 21:23	14° \mathring{B} 51'54	28.83502 AU
				direct	-4886 Nov 01 j 02:33	13° \mathring{B} 26'49	
conjunction	-4893 Jan 24 j 07:20	27° \mathring{A} 59'15	-1°-10'-30				
minimum elong	-4893 Jan 24 j 07:19	27° \mathring{A} 59'15	1°10'46	conjunction	-4885 Feb 11 j 16:26	15° \mathring{B} 55'33	-1°-43'-13
max. Earth dist.	-4893 Jan 25 j 09:15	28° \mathring{A} 01'41	30.88850 AU	minimum elong	-4885 Feb 11 j 16:26	15° \mathring{B} 55'33	1°43'28
	-4893 Mar 26 j 12:20	0° \mathring{B}		max. Earth dist.	-4885 Feb 12 j 15:48	15° \mathring{B} 57'45	30.83217 AU
retrograde	-4893 May 11 j 22:56	0° \mathring{B} 34'12		retrograde	-4885 May 30 j 08:54	18° \mathring{B} 30'29	
	-4893 Jun 28 j 14:46	30° \mathring{R} \mathring{A}		min. Earth dist.	-4885 Aug 17 j 10:10	17° \mathring{B} 06'27	28.83218 AU
min. Earth dist.	-4893 Jul 30 j 09:47	29° \mathring{A} 10'31	28.88560 AU	opposition	-4885 Aug 18 j 07:14	17° \mathring{B} 04'58	-1°-52'-17
opposition	-4893 Jul 31 j 09:41	29° \mathring{A} 08'50	-1°-17'-53	direct	-4885 Nov 03 j 11:17	15° \mathring{B} 41'25	
direct	-4893 Oct 16 j 16:58	27° \mathring{A} 45'48					

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Attention, astronomical year style is used: The year -4884 in astronomical counting style is the year 4885 BCE in historical counting style.

conjunction	-4884 Feb 14 j 05:52	18°☾10'17	-1°-46'-39	conjunction	-4876 Mar 03 j 22:03	6°≈12'20	-2°-8'-1
minimum elong	-4884 Feb 14 j 05:52	18°☾10'17	1°46'56	minimum elong	-4876 Mar 03 j 22:03	6°≈12'20	2°08'15
max. Earth dist.	-4884 Feb 15 j 05:50	18°☾12'32	30.82991 AU	max. Earth dist.	-4876 Mar 04 j 15:37	6°≈13'59	30.81008 AU
retrograde	-4884 May 31 j 21:39	20°☾45'15		retrograde	-4876 Jun 19 j 09:13	8°≈46'54	
opposition	-4884 Aug 19 j 18:39	19°☾19'46	-1°-55'-53	opposition	-4876 Sep 06 j 13:08	7°≈21'33	-2°-17'-56
min. Earth dist.	-4884 Aug 18 j 21:03	19°☾21'18	28.83038 AU	min. Earth dist.	-4876 Sep 05 j 21:57	7°≈22'38	28.81059 AU
direct	-4884 Nov 04 j 23:36	17°☾56'13		direct	-4876 Nov 22 j 21:05	5°≈57'29	
conjunction	-4883 Feb 15 j 19:29	20°☾25'14	-1°-49'-57	conjunction	-4875 Mar 06 j 12:23	8°≈27'21	-2°-9'-51
minimum elong	-4883 Feb 15 j 19:29	20°☾25'14	1°50'12	minimum elong	-4875 Mar 06 j 12:23	8°≈27'21	2°10'04
max. Earth dist.	-4883 Feb 16 j 18:01	20°☾27'21	30.82844 AU	max. Earth dist.	-4875 Mar 07 j 06:04	8°≈29'01	30.80809 AU
retrograde	-4883 Jun 03 j 11:24	23°☾00'12		retrograde	-4875 Jun 21 j 20:50	11°≈01'48	
min. Earth dist.	-4883 Aug 21 j 09:39	21°☾36'14	28.82925 AU	opposition	-4875 Sep 08 j 23:58	9°≈36'29	-2°-19'-47
opposition	-4883 Aug 22 j 06:05	21°☾34'47	-1°-59'-18	min. Earth dist.	-4875 Sep 08 j 08:26	9°≈37'35	28.80922 AU
direct	-4883 Nov 07 j 09:48	20°☾11'12		direct	-4875 Nov 25 j 09:55	8°≈12'19	
conjunction	-4882 Feb 18 j 09:29	22°☾40'23	-1°-53'-4	conjunction	-4874 Mar 09 j 02:38	10°≈42'17	-2°-11'-29
minimum elong	-4882 Feb 18 j 09:29	22°☾40'23	1°53'20	minimum elong	-4874 Mar 09 j 02:38	10°≈42'17	2°11'42
max. Earth dist.	-4882 Feb 19 j 08:31	22°☾42'33	30.82726 AU	max. Earth dist.	-4874 Mar 09 j 18:45	10°≈43'48	30.80737 AU
retrograde	-4882 Jun 06 j 00:23	25°☾15'22		retrograde	-4874 Jun 24 j 09:14	13°≈16'38	
opposition	-4882 Aug 24 j 17:30	23°☾50'00	-2°-2'-33	opposition	-4874 Sep 11 j 11:02	11°≈51'21	-2°-21'-25
min. Earth dist.	-4882 Aug 23 j 21:29	23°☾51'25	28.82795 AU	min. Earth dist.	-4874 Sep 10 j 20:32	11°≈52'22	28.80936 AU
direct	-4882 Nov 09 j 22:03	22°☾26'24		direct	-4874 Nov 27 j 19:49	10°≈27'07	
conjunction	-4881 Feb 20 j 23:21	24°☾55'43	-1°-56'-1	conjunction	-4873 Mar 11 j 16:55	12°≈57'12	-2°-12'-54
minimum elong	-4881 Feb 20 j 23:21	24°☾55'43	1°56'16	minimum elong	-4873 Mar 11 j 16:55	12°≈57'12	2°13'07
max. Earth dist.	-4881 Feb 21 j 20:33	24°☾57'42	30.82570 AU	max. Earth dist.	-4873 Mar 12 j 09:40	12°≈58'46	30.80821 AU
retrograde	-4881 Jun 08 j 15:16	27°☾30'40			-4873 May 13 j 18:30	15°≈	
min. Earth dist.	-4881 Aug 26 j 09:41	26°☾06'43	28.82616 AU	retrograde	-4873 Jun 26 j 21:15	15°≈31'27	
opposition	-4881 Aug 27 j 04:58	26°☾05'21	-2°-5'-36		-4873 Aug 10 j 17:42	15°≈	
direct	-4881 Nov 12 j 09:03	24°☾41'42		opposition	-4873 Sep 13 j 21:57	14°≈06'13	-2°-22'-50
conjunction	-4880 Feb 23 j 13:30	27°☾11'09	-1°-58'-47	min. Earth dist.	-4873 Sep 13 j 07:36	14°≈07'14	28.81092 AU
minimum elong	-4880 Feb 23 j 13:30	27°☾11'09	1°59'02	direct	-4873 Nov 30 j 07:40	12°≈41'57	
max. Earth dist.	-4880 Feb 24 j 10:44	27°☾13'08	30.82339 AU		-4872 Mar 07 j 21:15	15°≈	
retrograde	-4880 Jun 10 j 04:46	29°☾46'03		conjunction	-4872 Mar 13 j 07:11	15°≈12'08	-2°-14'-8
opposition	-4880 Aug 28 j 16:23	28°☾20'45	-2°-8'-28	minimum elong	-4872 Mar 13 j 07:11	15°≈12'08	2°14'21
min. Earth dist.	-4880 Aug 27 j 22:16	28°☾22'02	28.82348 AU	max. Earth dist.	-4872 Mar 13 j 22:17	15°≈13'33	30.81058 AU
direct	-4880 Nov 13 j 22:31	26°☾57'02		retrograde	-4872 Jun 28 j 10:56	17°≈46'20	
conjunction	-4879 Feb 25 j 03:36	29°☾26'35	-2°-1'-22	opposition	-4872 Sep 15 j 08:51	16°≈21'09	-2°-24'-2
minimum elong	-4879 Feb 25 j 03:35	29°☾26'35	2°01'37	min. Earth dist.	-4872 Sep 14 j 19:04	16°≈22'08	28.81402 AU
max. Earth dist.	-4879 Feb 25 j 23:12	29°☾28'25	30.82040 AU	direct	-4872 Nov 18 j 08:25	15°≈	
retrograde	-4879 Mar 12 j 02:32	0°≈			-4872 Dec 01 j 18:34	14°≈56'52	
min. Earth dist.	-4879 Jun 12 j 19:09	2°≈01'26			-4872 Dec 15 j 06:12	15°≈	
opposition	-4879 Aug 30 j 09:41	0°≈37'23	28.82016 AU	conjunction	-4871 Mar 15 j 21:44	17°≈27'11	-2°-15'-9
direct	-4879 Aug 31 j 03:42	0°≈36'07	-2°-11'-8	minimum elong	-4871 Mar 15 j 21:44	17°≈27'11	2°15'22
	-4879 Sep 22 j 02:37	30°≈		max. Earth dist.	-4871 Mar 16 j 13:10	17°≈28'38	30.81413 AU
	-4879 Nov 16 j 11:08	29°☾12'19		retrograde	-4871 Jun 30 j 23:32	20°≈01'18	
	-4878 Jan 09 j 02:43	0°≈		opposition	-4871 Sep 17 j 19:47	18°≈36'13	-2°-25'00
conjunction	-4878 Feb 27 j 17:51	1°≈41'57	-2°-3'-47	min. Earth dist.	-4871 Sep 17 j 07:08	18°≈37'07	28.81792 AU
minimum elong	-4878 Feb 27 j 17:51	1°≈41'57	2°04'01	direct	-4871 Dec 04 j 07:27	17°≈11'55	
max. Earth dist.	-4878 Feb 28 j 12:57	1°≈43'45	30.81673 AU	conjunction	-4870 Mar 18 j 12:18	19°≈42'23	-2°-15'-57
retrograde	-4878 Jun 15 j 07:10	4°≈16'42		minimum elong	-4870 Mar 18 j 12:18	19°≈42'23	2°16'09
opposition	-4878 Sep 02 j 14:53	2°≈51'24	-2°-13'-36	max. Earth dist.	-4870 Mar 19 j 01:58	19°≈43'40	30.81834 AU
min. Earth dist.	-4878 Sep 01 j 22:31	2°≈52'33	28.81648 AU	retrograde	-4870 Jul 03 j 13:56	22°≈16'25	
direct	-4878 Nov 18 j 22:42	1°≈27'30		opposition	-4870 Sep 20 j 06:34	20°≈51'25	-2°-25'-45
conjunction	-4877 Mar 02 j 08:03	3°≈57'13	-2°-6'00	min. Earth dist.	-4870 Sep 19 j 18:08	20°≈52'19	28.82223 AU
minimum elong	-4877 Mar 02 j 08:02	3°≈57'13	2°06'14	direct	-4870 Dec 06 j 19:39	19°≈27'07	
max. Earth dist.	-4877 Mar 03 j 02:31	3°≈58'57	30.81318 AU	conjunction	-4869 Mar 21 j 03:02	21°≈57'44	-2°-16'-33
retrograde	-4877 Jun 17 j 21:23	6°≈31'52		minimum elong	-4869 Mar 21 j 03:02	21°≈57'44	2°16'45
min. Earth dist.	-4877 Sep 04 j 09:15	5°≈07'43	28.81313 AU	max. Earth dist.	-4869 Mar 21 j 16:07	21°≈58'57	30.82246 AU
opposition	-4877 Sep 05 j 01:57	5°≈06'32	-2°-15'-52	retrograde	-4869 Jul 06 j 02:48	24°≈31'42	
direct	-4877 Nov 21 j 11:09	3°≈42'33		opposition	-4869 Sep 22 j 17:35	23°≈06'47	-2°-26'-17
				min. Earth dist.	-4869 Sep 22 j 07:01	23°≈07'32	28.82618 AU

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Attention, astronomical year style is used: The year -4869 in astronomical counting style is the year 4870 BCE in historical counting style.

direct	-4869 Dec 09 j 07:18	21° 42 '27		direct	-4861 Dec 27 j 06:47	9° 43 '22	
conjunction	-4868 Mar 22 j 17:42	24° 13 '12	-2°-16'-57	conjunction	-4860 Apr 10 j 15:17	12° 14 '48	-2°-12'-36
minimum elong	-4868 Mar 22 j 17:42	24° 13 '12	2°17'07	minimum elong	-4860 Apr 10 j 15:17	12° 14 '48	2°12'42
max. Earth dist.	-4868 Mar 23 j 05:29	24° 14 '18	30.82614 AU	max. Earth dist.	-4860 Apr 10 j 19:21	12° 15 '11	30.84695 AU
retrograde	-4868 Jul 07 j 17:42	26° 47 '03		retrograde	-4860 Jul 25 j 17:33	14° 47 '30	
opposition	-4868 Sep 24 j 04:29	25° 22 '13	-2°-26'-35	opposition	-4860 Oct 11 j 17:53	13° 23 '01	-2°-21'-2
min. Earth dist.	-4868 Sep 23 j 18:02	25° 22 '57	28.82936 AU	min. Earth dist.	-4860 Oct 11 j 15:04	13° 23 '13	28.85169 AU
direct	-4868 Dec 10 j 20:20	23° 57 '51		direct	-4860 Dec 28 j 19:06	11° 58 '09	
conjunction	-4867 Mar 25 j 08:34	26° 28 '42	-2°-17'-8	conjunction	-4859 Apr 13 j 05:57	14° 29 '41	-2°-11'-8
minimum elong	-4867 Mar 25 j 08:34	26° 28 '42	2°17'18	minimum elong	-4859 Apr 13 j 05:57	14° 29 '41	2°11'14
max. Earth dist.	-4867 Mar 25 j 18:50	26° 29 '40	30.82880 AU	max. Earth dist.	-4859 Apr 13 j 08:49	14° 29 '57	30.85357 AU
retrograde	-4867 Jul 10 j 05:42	29° 02 '27		retrograde	-4859 Jul 28 j 07:41	17° 02 '14	
opposition	-4867 Sep 26 j 15:23	27° 37 '39	-2°-26'-40	opposition	-4859 Oct 14 j 04:15	15° 37 '50	-2°-19'-21
min. Earth dist.	-4867 Sep 26 j 07:04	27° 38 '15	28.83162 AU	min. Earth dist.	-4859 Oct 14 j 01:19	15° 38 '02	28.85870 AU
direct	-4867 Dec 13 j 06:57	26° 13 '14		direct	-4859 Dec 31 j 08:48	14° 12 '57	
conjunction	-4866 Mar 27 j 23:30	28° 44 '11	-2°-17'-6	conjunction	-4858 Apr 15 j 20:39	16° 44 '35	-2°-9'-27
minimum elong	-4866 Mar 27 j 23:31	28° 44 '11	2°17'16	minimum elong	-4858 Apr 15 j 20:40	16° 44 '36	2°09'33
max. Earth dist.	-4866 Mar 28 j 09:06	28° 45 '05	30.83072 AU	max. Earth dist.	-4858 Apr 15 j 22:34	16° 44 '46	30.86095 AU
	-4866 May 02 j 07:14	0° 17 '47		retrograde	-4858 Jul 30 j 19:28	19° 17 '01	
retrograde	-4866 Jul 12 j 17:50	1° 17 '47		opposition	-4858 Oct 16 j 14:53	17° 52 '43	-2°-17'-27
	-4866 Sep 25 j 00:32	30° 53 '03		min. Earth dist.	-4858 Oct 16 j 13:51	17° 52 '47	28.86634 AU
opposition	-4866 Sep 29 j 02:11	29° 53 '03	-2°-26'-31	direct	-4857 Jan 02 j 20:05	16° 27 '49	
min. Earth dist.	-4866 Sep 28 j 18:02	29° 53 '37	28.83312 AU				
direct	-4866 Dec 15 j 20:18	28° 28 '33		conjunction	-4857 Apr 18 j 11:15	18° 59 '33	-2°-7'-35
	-4865 Mar 03 j 06:39	0° 59 '35		minimum elong	-4857 Apr 18 j 11:16	18° 59 '34	2°07'40
conjunction	-4865 Mar 30 j 14:04	0° 59 '35	-2°-16'-52	max. Earth dist.	-4857 Apr 18 j 12:33	18° 59 '41	30.86873 AU
minimum elong	-4865 Mar 30 j 14:04	0° 59 '35	2°17'02	retrograde	-4857 Aug 02 j 08:21	21° 31 '51	
max. Earth dist.	-4865 Mar 30 j 21:40	1° 00 '18	30.83202 AU	opposition	-4857 Oct 19 j 01:23	20° 07 '38	-2°-15'-21
retrograde	-4865 Jul 15 j 06:01	3° 33 '03		min. Earth dist.	-4857 Oct 19 j 00:33	20° 07 '42	28.87391 AU
opposition	-4865 Oct 01 j 13:00	2° 08 '19	-2°-26'-10	direct	-4856 Jan 05 j 09:16	18° 42 '44	
min. Earth dist.	-4865 Oct 01 j 06:20	2° 08 '48	28.83442 AU	conjunction	-4856 Apr 20 j 01:57	21° 14 '34	-2°-5'-31
direct	-4865 Dec 18 j 06:26	0° 43 '45		minimum elong	-4856 Apr 20 j 01:58	21° 14 '34	2°05'35
conjunction	-4864 Apr 01 j 04:52	3° 14 '52	-2°-16'-26	max. Earth dist.	-4856 Apr 20 j 01:11	21° 14 '29	30.87608 AU
minimum elong	-4864 Apr 01 j 04:53	3° 14 '52	2°16'35	retrograde	-4856 Aug 03 j 21:11	23° 46 '42	
max. Earth dist.	-4864 Apr 01 j 12:33	3° 15 '35	30.83338 AU	opposition	-4856 Oct 20 j 11:56	22° 22 '34	-2°-13'-2
retrograde	-4864 Jul 16 j 17:11	5° 48 '09		min. Earth dist.	-4856 Oct 20 j 12:47	22° 22 '31	28.88096 AU
opposition	-4864 Oct 02 j 23:34	4° 23 '28	-2°-25'-34	direct	-4855 Jan 06 j 19:51	20° 57 '38	
min. Earth dist.	-4864 Oct 02 j 17:30	4° 23 '54	28.83586 AU	conjunction	-4855 Apr 22 j 16:51	23° 29 '32	-2°-3'-16
direct	-4864 Dec 19 j 18:22	2° 58 '49		minimum elong	-4855 Apr 22 j 16:52	23° 29 '32	2°03'20
conjunction	-4863 Apr 03 j 19:30	5° 30 '00	-2°-15'-47	max. Earth dist.	-4855 Apr 22 j 15:39	23° 29 '25	30.88270 AU
minimum elong	-4863 Apr 03 j 19:30	5° 30 '00	2°15'55	retrograde	-4855 Aug 06 j 07:54	26° 01 '30	
max. Earth dist.	-4863 Apr 04 j 01:08	5° 30 '31	30.83517 AU	opposition	-4855 Oct 22 j 22:31	24° 37 '27	-2°-10'-31
retrograde	-4863 Jul 19 j 05:15	8° 03 '09		min. Earth dist.	-4855 Oct 22 j 00:16	24° 37 '19	28.88695 AU
opposition	-4863 Oct 05 j 10:12	6° 38 '29	-2°-24'-46	direct	-4854 Jan 09 j 08:31	23° 12 '28	
min. Earth dist.	-4863 Oct 05 j 04:53	6° 38 '52	28.83807 AU	conjunction	-4854 Apr 25 j 07:27	25° 44 '25	-2°00'-49
direct	-4863 Dec 22 j 05:52	5° 13 '45		minimum elong	-4854 Apr 25 j 07:28	25° 44 '25	2°00'52
conjunction	-4862 Apr 06 j 10:12	7° 45 '01	-2°-14'-56	max. Earth dist.	-4854 Apr 25 j 03:49	25° 44 '04	30.88830 AU
minimum elong	-4862 Apr 06 j 10:13	7° 45 '01	2°15'03	retrograde	-4854 Aug 08 j 19:21	28° 16 '12	
max. Earth dist.	-4862 Apr 06 j 16:07	7° 45 '34	30.83778 AU	opposition	-4854 Oct 25 j 09:02	26° 52 '12	-2°-7'-48
retrograde	-4862 Jul 21 j 16:09	10° 18 '00		min. Earth dist.	-4854 Oct 25 j 11:50	26° 52 '00	28.89215 AU
opposition	-4862 Oct 07 j 20:46	8° 53 '23	-2°-23'-45	direct	-4853 Jan 11 j 20:02	25° 27 '08	
min. Earth dist.	-4862 Oct 07 j 16:31	8° 53 '42	28.84121 AU	conjunction	-4853 Apr 27 j 22:09	27° 59 '08	-1°-58'-12
direct	-4862 Dec 24 j 18:52	7° 28 '36		minimum elong	-4853 Apr 27 j 22:09	27° 59 '08	1°58'15
conjunction	-4861 Apr 09 j 00:44	9° 59 '56	-2°-13'-52	max. Earth dist.	-4853 Apr 27 j 18:26	27° 58 '47	30.89318 AU
minimum elong	-4861 Apr 09 j 00:44	9° 59 '56	2°13'59		-4853 Jun 29 j 04:16	0° 30 '44	
max. Earth dist.	-4861 Apr 09 j 04:55	10° 00 '20	30.84169 AU	retrograde	-4853 Aug 11 j 05:27	0° 30 '44	
retrograde	-4861 Jul 24 j 05:34	12° 32 '47			-4853 Sep 24 j 00:06	30° 06 '46	
opposition	-4861 Oct 10 j 07:16	11° 08 '13	-2°-22'-30	opposition	-4853 Oct 27 j 19:31	29° 06 '46	-2°-4'-55
min. Earth dist.	-4861 Oct 10 j 02:54	11° 08 '32	28.84582 AU	min. Earth dist.	-4853 Oct 27 j 23:46	29° 06 '28	28.89670 AU
				direct	-4852 Jan 14 j 08:28	27° 41 '38	

Attention, astronomical year style is used: The year -4852 in astronomical counting style is the year 4853 BCE in historical counting style.

	-4852 Apr 23 j 09:26	0°♈		conjunction	-4844 May 18 j 05:27	18°♈05'35	-1°-27'-17
				minimum elong	-4844 May 18 j 05:28	18°♈05'35	1°27'13
conjunction	-4852 Apr 29 j 12:31	0°♈13'40	-1°-55'-24	max. Earth dist.	-4844 May 17 j 18:08	18°♈04'32	30.96229 AU
minimum elong	-4852 Apr 29 j 12:32	0°♈13'40	1°55'26	retrograde	-4844 Aug 30 j 12:26	20°♈35'42	
max. Earth dist.	-4852 Apr 29 j 06:41	0°♈13'07	30.89773 AU	opposition	-4844 Nov 15 j 16:35	19°♈12'25	-1°-31'-7
retrograde	-4852 Aug 12 j 17:53	2°♈45'04		min. Earth dist.	-4844 Nov 16 j 03:38	19°♈11'38	28.96831 AU
opposition	-4852 Oct 29 j 05:53	1°♈21'08	-2°-1'-50	direct	-4843 Feb 02 j 22:21	17°♈47'07	
min. Earth dist.	-4852 Oct 29 j 10:21	1°♈20'49	28.90115 AU				
	-4852 Dec 31 j 07:22	30°♈		conjunction	-4843 May 20 j 19:22	20°♈19'37	-1°-23'-7
direct	-4851 Jan 15 j 20:30	29°♈55'56		minimum elong	-4843 May 20 j 19:23	20°♈19'37	1°23'04
	-4851 Jan 31 j 10:49	0°♈		max. Earth dist.	-4843 May 20 j 05:51	20°♈18'21	30.97272 AU
				retrograde	-4843 Sep 02 j 00:20	22°♈49'35	
conjunction	-4851 May 02 j 03:02	2°♈28'00	-1°-52'-27	opposition	-4843 Nov 18 j 02:57	21°♈26'23	-1°-26'-36
minimum elong	-4851 May 02 j 03:03	2°♈28'00	1°52'28	min. Earth dist.	-4843 Nov 18 j 14:15	21°♈25'35	28.97830 AU
max. Earth dist.	-4851 May 01 j 20:56	2°♈27'25	30.90224 AU	direct	-4842 Feb 05 j 09:33	20°♈01'04	
retrograde	-4851 Aug 15 j 04:21	4°♈59'12					
opposition	-4851 Oct 31 j 16:15	3°♈35'18	-1°-58'-35	conjunction	-4842 May 23 j 09:23	22°♈33'36	-1°-18'-50
min. Earth dist.	-4851 Oct 31 j 22:27	3°♈34'51	28.90585 AU	minimum elong	-4842 May 23 j 09:24	22°♈33'36	1°18'45
direct	-4850 Jan 18 j 09:19	2°♈10'02		max. Earth dist.	-4842 May 22 j 19:33	22°♈32'18	30.98222 AU
				retrograde	-4842 Sep 04 j 09:54	25°♈03'24	
conjunction	-4850 May 04 j 17:18	4°♈42'08	-1°-49'-19	opposition	-4842 Nov 20 j 13:34	23°♈40'16	-1°-21'-57
minimum elong	-4850 May 04 j 17:19	4°♈42'08	1°49'19	min. Earth dist.	-4842 Nov 21 j 02:42	23°♈39'21	28.98730 AU
max. Earth dist.	-4850 May 04 j 09:53	4°♈41'26	30.90743 AU	direct	-4841 Feb 07 j 22:28	22°♈14'56	
retrograde	-4850 Aug 17 j 17:09	7°♈13'09					
opposition	-4850 Nov 03 j 02:33	5°♈49'17	-1°-55'-9	conjunction	-4841 May 25 j 23:00	24°♈47'28	-1°-14'-26
min. Earth dist.	-4850 Nov 03 j 08:27	5°♈48'52	28.91141 AU	minimum elong	-4841 May 25 j 23:01	24°♈47'28	1°14'22
direct	-4849 Jan 20 j 23:21	4°♈23'58		max. Earth dist.	-4841 May 25 j 07:32	24°♈46'01	30.99090 AU
				retrograde	-4841 Sep 06 j 21:47	27°♈17'05	
conjunction	-4849 May 07 j 07:20	6°♈56'06	-1°-46'-1	opposition	-4841 Nov 22 j 23:57	25°♈54'00	-1°-17'-11
minimum elong	-4849 May 07 j 07:21	6°♈56'06	1°46'02	min. Earth dist.	-4841 Nov 23 j 13:03	25°♈53'05	28.99546 AU
max. Earth dist.	-4849 May 06 j 23:22	6°♈55'22	30.91354 AU	direct	-4840 Feb 10 j 12:16	24°♈28'37	
retrograde	-4849 Aug 20 j 04:05	9°♈26'57					
opposition	-4849 Nov 05 j 12:59	8°♈03'08	-1°-51'-33	conjunction	-4840 May 27 j 12:46	27°♈01'09	-1°-9'-55
min. Earth dist.	-4849 Nov 05 j 20:26	8°♈02'37	28.91821 AU	minimum elong	-4840 May 27 j 12:47	27°♈01'09	1°09'50
direct	-4848 Jan 23 j 11:03	6°♈37'47		max. Earth dist.	-4840 May 26 j 20:30	26°♈59'38	30.99872 AU
				retrograde	-4840 Sep 08 j 08:13	29°♈30'35	
conjunction	-4848 May 08 j 21:27	9°♈09'58	-1°-42'-35	opposition	-4840 Nov 24 j 10:21	28°♈07'32	-1°-12'-19
minimum elong	-4848 May 08 j 21:28	9°♈09'58	1°42'34	min. Earth dist.	-4840 Nov 25 j 01:19	28°♈06'29	29.00304 AU
max. Earth dist.	-4848 May 08 j 13:06	9°♈09'12	30.92115 AU	direct	-4839 Feb 12 j 00:05	26°♈42'06	
retrograde	-4848 Aug 21 j 16:24	11°♈40'39		max. Earth dist.	-4839 May 29 j 09:28	29°♈13'03	31.00626 AU
opposition	-4848 Nov 06 j 23:07	10°♈16'55	-1°-47'-46				
min. Earth dist.	-4848 Nov 07 j 06:22	10°♈16'24	28.92639 AU	conjunction	-4839 May 30 j 02:23	29°♈14'37	-1°-5'-19
direct	-4847 Jan 25 j 00:30	8°♈51'33		minimum elong	-4839 May 30 j 02:24	29°♈14'37	1°05'15
					-4839 Jun 19 j 17:40	0°♈	
conjunction	-4847 May 11 j 11:31	11°♈23'48	-1°-38'-58	retrograde	-4839 Sep 10 j 20:05	1°♈43'51	
minimum elong	-4847 May 11 j 11:31	11°♈23'48	1°38'58	opposition	-4839 Nov 26 j 20:43	0°♈20'50	-1°-7'-21
max. Earth dist.	-4847 May 11 j 01:46	11°♈22'54	30.93010 AU	min. Earth dist.	-4839 Nov 27 j 11:39	0°♈19'47	29.01041 AU
retrograde	-4847 Aug 24 j 04:57	13°♈54'20			-4839 Dec 09 j 07:00	30°♈	
opposition	-4847 Nov 09 j 09:31	12°♈30'42	-1°-43'-50	direct	-4838 Feb 14 j 14:41	28°♈55'21	
min. Earth dist.	-4847 Nov 09 j 17:52	12°♈30'06	28.93602 AU		-4838 Apr 20 j 16:39	0°♈	
direct	-4846 Jan 27 j 11:26	11°♈05'21					
				conjunction	-4838 Jun 01 j 15:39	1°♈27'50	-1°00'-38
conjunction	-4846 May 14 j 01:30	13°♈37'40	-1°-35'-13	minimum elong	-4838 Jun 01 j 15:39	1°♈27'50	1°00'31
minimum elong	-4846 May 14 j 01:31	13°♈37'40	1°35'11	max. Earth dist.	-4838 May 31 j 21:31	1°♈26'09	31.01373 AU
max. Earth dist.	-4846 May 13 j 15:57	13°♈36'46	30.94034 AU	retrograde	-4838 Sep 13 j 07:46	3°♈56'53	
retrograde	-4846 Aug 26 j 15:04	16°♈08'03		opposition	-4838 Nov 29 j 07:09	2°♈33'53	-1°-2'-18
opposition	-4846 Nov 11 j 19:49	14°♈44'32	-1°-39'-45	min. Earth dist.	-4838 Nov 29 j 23:06	2°♈32'45	29.01819 AU
min. Earth dist.	-4846 Nov 12 j 04:39	14°♈43'55	28.94654 AU	direct	-4837 Feb 17 j 03:05	1°♈08'21	
direct	-4845 Jan 30 j 00:04	13°♈19'13		max. Earth dist.	-4837 Jun 03 j 11:05	3°♈39'09	31.02189 AU
conjunction	-4845 May 16 j 15:23	15°♈51'35	-1°-31'-19	conjunction	-4837 Jun 04 j 04:55	3°♈40'49	0°-55'-51
minimum elong	-4845 May 16 j 15:24	15°♈51'35	1°31'18	minimum elong	-4837 Jun 04 j 04:56	3°♈40'49	0°55'45
max. Earth dist.	-4845 May 16 j 03:55	15°♈50'31	30.95128 AU	retrograde	-4837 Sep 15 j 17:13	6°♈09'40	
retrograde	-4845 Aug 29 j 02:25	18°♈21'51		opposition	-4837 Dec 01 j 17:27	4°♈46'43	0°-57'-9
opposition	-4845 Nov 14 j 06:06	16°♈58'27	-1°-35'-30	min. Earth dist.	-4837 Dec 02 j 09:42	4°♈45'34	29.02670 AU
min. Earth dist.	-4845 Nov 14 j 15:42	16°♈57'46	28.95763 AU	direct	-4836 Feb 19 j 16:34	3°♈21'09	
direct	-4844 Feb 01 j 10:48	15°♈33'08					

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Attention, astronomical year style is used: The year -4836 in astronomical counting style is the year 4837 BCE in historical counting style.

conjunction	-4836 Jun 05 j 17:58	5°♄53'35	0°-51'00	direct	-4828 Mar 08 j 17:00	21°♄02'33	
minimum elong	-4836 Jun 05 j 17:58	5°♄53'35	0°50'52	max. Earth dist.	-4828 Jun 23 j 01:07	23°♄32'52	31.12020 AU
max. Earth dist.	-4836 Jun 04 j 22:36	5°♄51'47	31.03101 AU				
retrograde	-4836 Sep 17 j 04:22	8°♄22'16		conjunction	-4828 Jun 24 j 00:17	23°♄35'01	0°-10'-7
opposition	-4836 Dec 03 j 03:50	6°♄59'22	0°-51'-55	minimum elong	-4828 Jun 24 j 00:17	23°♄35'01	0°09'56
min. Earth dist.	-4836 Dec 03 j 20:18	6°♄58'13	29.03646 AU	behind sun begin	-4828 Jun 23 j 19:00	23°♄34'32	
direct	-4835 Feb 21 j 03:57	5°♄33'48		behind sun end	-4828 Jun 24 j 05:34	23°♄35'29	
				retrograde	-4828 Oct 04 j 17:00	26°♄02'43	
conjunction	-4835 Jun 08 j 07:05	8°♄06'14	0°-46'-4	opposition	-4828 Dec 20 j 16:42	24°♄40'29	0°-8'00
minimum elong	-4835 Jun 08 j 07:05	8°♄06'14	0°45'57	min. Earth dist.	-4828 Dec 21 j 14:09	24°♄38'59	29.12438 AU
max. Earth dist.	-4835 Jun 07 j 12:28	8°♄04'30	31.04137 AU	direct	-4827 Mar 11 j 06:50	23°♄15'06	
retrograde	-4835 Sep 19 j 13:41	10°♄34'45		max. Earth dist.	-4827 Jun 25 j 11:48	25°♄45'13	31.12787 AU
opposition	-4835 Dec 05 j 14:20	9°♄11'56	0°-46'-37				
min. Earth dist.	-4835 Dec 06 j 07:40	9°♄10'43	29.04736 AU	conjunction	-4827 Jun 26 j 12:35	25°♄47'31	0°-4'-53
direct	-4834 Feb 23 j 15:47	7°♄46'23		minimum elong	-4827 Jun 26 j 12:35	25°♄47'31	0°04'43
				behind sun begin	-4827 Jun 26 j 06:11	25°♄46'57	
conjunction	-4834 Jun 10 j 19:56	10°♄18'49	0°-41'-4	behind sun end	-4827 Jun 26 j 18:58	25°♄48'05	
minimum elong	-4834 Jun 10 j 19:57	10°♄18'49	0°40'56	retrograde	-4827 Oct 07 j 04:18	28°♄15'06	
max. Earth dist.	-4834 Jun 09 j 23:55	10°♄16'57	31.05300 AU	opposition	-4827 Dec 23 j 03:26	26°♄52'53	0°-2'-24
retrograde	-4834 Sep 22 j 00:53	12°♄47'13		min. Earth dist.	-4827 Dec 24 j 01:12	26°♄51'22	29.13175 AU
opposition	-4834 Dec 08 j 00:44	11°♄24'30	0°-41'-14	direct	-4826 Mar 13 j 19:02	25°♄27'29	
min. Earth dist.	-4834 Dec 08 j 17:38	11°♄23'18	29.05948 AU	asc. node	-4826 May 31 j 03:32	26°♄57'14	
direct	-4833 Feb 26 j 02:52	9°♄58'58		max. Earth dist.	-4826 Jun 28 j 00:50	27°♄57'37	31.13495 AU
conjunction	-4833 Jun 13 j 08:45	12°♄31'25	0°-36'-1	conjunction	-4826 Jun 29 j 00:54	27°♄59'51	0°00'26
minimum elong	-4833 Jun 13 j 08:46	12°♄31'25	0°35'53	minimum elong	-4826 Jun 29 j 00:52	27°♄59'51	0°00'39
max. Earth dist.	-4833 Jun 12 j 13:11	12°♄29'36	31.06546 AU	behind sun begin	-4826 Jun 28 j 18:21	27°♄59'16	
retrograde	-4833 Sep 24 j 09:54	14°♄59'43		behind sun end	-4826 Jun 29 j 07:24	28°♄00'26	
opposition	-4833 Dec 10 j 11:19	13°♄37'06	0°-35'-48		-4826 Aug 30 j 10:05	0°♂	
min. Earth dist.	-4833 Dec 11 j 05:42	13°♄35'49	29.07209 AU	retrograde	-4826 Oct 09 j 13:30	0°♂27'17	
direct	-4832 Feb 28 j 14:35	12°♄11'38			-4826 Nov 19 j 14:25	30°♂	
				opposition	-4826 Dec 25 j 14:15	29°♄05'06	0°03'11
conjunction	-4832 Jun 14 j 21:33	14°♄44'06	0°-30'-54	min. Earth dist.	-4826 Dec 26 j 12:59	29°♄03'31	29.13868 AU
minimum elong	-4832 Jun 14 j 21:34	14°♄44'06	0°30'44	direct	-4825 Mar 16 j 07:45	27°♄39'40	
max. Earth dist.	-4832 Jun 14 j 00:42	14°♄42'10	31.07816 AU		-4825 Jun 26 j 04:16	0°♂	
	-4832 Jun 22 j 00:46	15°♄		max. Earth dist.	-4825 Jun 30 j 11:25	0°♂09'37	31.14193 AU
retrograde	-4832 Sep 25 j 21:26	17°♄12'17					
opposition	-4832 Dec 11 j 21:45	15°♄49'46	0°-30'-18	conjunction	-4825 Jul 01 j 12:43	0°♂11'58	0°05'43
min. Earth dist.	-4832 Dec 12 j 15:52	15°♄48'30	29.08456 AU	minimum elong	-4825 Jul 01 j 12:43	0°♂11'58	0°05'55
	-4831 Jan 12 j 13:26	15°♂		behind sun begin	-4825 Jul 01 j 06:29	0°♂11'24	
direct	-4831 Mar 02 j 03:02	14°♄24'20		behind sun end	-4825 Jul 01 j 18:57	0°♂12'31	
	-4831 Apr 18 j 18:49	15°♄		retrograde	-4825 Oct 11 j 23:41	2°♂39'16	
				opposition	-4825 Dec 28 j 00:56	1°♂17'05	0°08'47
conjunction	-4831 Jun 17 j 10:26	16°♄56'50	0°-25'-44	min. Earth dist.	-4825 Dec 28 j 23:03	1°♂15'33	29.14581 AU
minimum elong	-4831 Jun 17 j 10:26	16°♄56'50	0°25'35		-4824 Feb 23 j 19:09	30°♂	
max. Earth dist.	-4831 Jun 16 j 13:08	16°♄54'52	31.09026 AU	direct	-4824 Mar 17 j 19:45	29°♄51'38	
retrograde	-4831 Sep 28 j 07:56	19°♄24'56			-4824 Apr 09 j 14:04	0°♂	
opposition	-4831 Dec 14 j 08:32	18°♄02'30	0°-24'-46	max. Earth dist.	-4824 Jul 02 j 00:08	2°♂21'35	31.14921 AU
min. Earth dist.	-4831 Dec 15 j 04:20	18°♄01'07	29.09631 AU				
direct	-4830 Mar 04 j 14:07	16°♄37'07		conjunction	-4824 Jul 03 j 00:42	2°♂23'52	0°10'55
				minimum elong	-4824 Jul 03 j 00:41	2°♂23'52	0°11'08
conjunction	-4830 Jun 19 j 23:02	19°♄09'36	0°-20'-33	behind sun begin	-4824 Jul 02 j 19:52	2°♂23'27	
minimum elong	-4830 Jun 19 j 23:02	19°♄09'36	0°20'23	behind sun end	-4824 Jul 03 j 05:31	2°♂24'18	
max. Earth dist.	-4830 Jun 19 j 01:09	19°♄07'35	31.10149 AU	retrograde	-4824 Oct 13 j 07:25	4°♂51'03	
retrograde	-4830 Sep 30 j 19:38	21°♄37'35		opposition	-4824 Dec 29 j 11:44	3°♂28'54	0°14'21
opposition	-4830 Dec 16 j 19:16	20°♄15'14	0°-19'-12	min. Earth dist.	-4824 Dec 30 j 10:54	3°♂27'17	29.15351 AU
min. Earth dist.	-4830 Dec 17 j 15:00	20°♄13'52	29.10686 AU	direct	-4823 Mar 20 j 07:20	2°♂03'26	
direct	-4829 Mar 07 j 04:36	18°♄49'52		max. Earth dist.	-4823 Jul 04 j 11:12	4°♂33'16	31.15744 AU
conjunction	-4829 Jun 22 j 11:39	21°♄22'21	0°-15'-20	conjunction	-4823 Jul 05 j 12:24	4°♂35'37	0°16'06
minimum elong	-4829 Jun 22 j 11:40	21°♄22'21	0°15'11	minimum elong	-4823 Jul 05 j 12:24	4°♂35'37	0°16'19
behind sun begin	-4829 Jun 22 j 09:40	21°♄22'10		retrograde	-4823 Oct 15 j 17:59	7°♂02'41	
behind sun end	-4829 Jun 22 j 13:39	21°♄22'32		opposition	-4823 Dec 31 j 22:32	5°♂40'33	0°19'54
max. Earth dist.	-4829 Jun 21 j 12:30	21°♄20'12	31.11141 AU	min. Earth dist.	-4822 Jan 01 j 20:40	5°♂39'01	29.16223 AU
retrograde	-4829 Oct 03 j 07:28	23°♄50'12		direct	-4822 Mar 22 j 18:51	4°♂15'07	
opposition	-4829 Dec 19 j 05:55	22°♄27'55	0°-13'-36				
min. Earth dist.	-4829 Dec 20 j 02:50	22°♄26'28	29.11627 AU	conjunction	-4822 Jul 07 j 23:57	6°♂47'14	0°21'17

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Attention, astronomical year style is used: The year -4822 in astronomical counting style is the year 4823 BCE in historical counting style.

minimum elong	-4822 Jul 07 j 23:57	6°II47'14	0°21'30	opposition	-4813 Jan 21 j 02:25	25°II24'05	1°07'31
max. Earth dist.	-4822 Jul 06 j 23:07	6°II44'56	31.16665 AU	min. Earth dist.	-4813 Jan 22 j 02:16	25°II22'27	29.23727 AU
retrograde	-4822 Oct 18 j 03:34	9°II14'14		direct	-4813 Apr 12 j 09:37	23°II58'53	
opposition	-4821 Jan 03 j 09:28	7°II52'09	0°25'25	max. Earth dist.	-4813 Jul 27 j 02:54	26°II28'03	31.23874 AU
min. Earth dist.	-4821 Jan 04 j 08:32	7°II50'33	29.17206 AU				
direct	-4821 Mar 25 j 05:26	6°II26'45		conjunction	-4813 Jul 28 j 04:55	26°II30'29	1°05'32
max. Earth dist.	-4821 Jul 09 j 10:51	8°II56'32	31.17693 AU	minimum elong	-4813 Jul 28 j 04:55	26°II30'29	1°05'47
				retrograde	-4813 Nov 06 j 23:10	28°II56'52	
conjunction	-4821 Jul 10 j 11:30	8°II58'50	0°26'25	opposition	-4812 Jan 23 j 13:38	27°II35'03	1°12'23
minimum elong	-4821 Jul 10 j 11:30	8°II58'50	0°26'38	min. Earth dist.	-4812 Jan 24 j 14:23	27°II33'21	29.24168 AU
retrograde	-4821 Oct 20 j 14:20	11°II25'44		direct	-4812 Apr 13 j 20:27	26°II09'50	
opposition	-4820 Jan 05 j 20:10	10°II03'44	0°30'54				
min. Earth dist.	-4820 Jan 06 j 18:40	10°II02'11	29.18253 AU	conjunction	-4812 Jul 29 j 15:33	28°II41'20	1°10'03
direct	-4820 Mar 26 j 19:14	8°II38'22		minimum elong	-4812 Jul 29 j 15:32	28°II41'20	1°10'18
				max. Earth dist.	-4812 Jul 28 j 14:02	28°II38'57	31.24320 AU
conjunction	-4820 Jul 11 j 23:01	11°II10'26	0°31'32		-4812 Sep 04 j 12:47	0°II	
minimum elong	-4820 Jul 11 j 23:00	11°II10'26	0°31'46	retrograde	-4812 Nov 08 j 09:13	1°II07'40	
max. Earth dist.	-4820 Jul 10 j 21:46	11°II08'05	31.18752 AU		-4811 Jan 16 j 09:34	30°RII	
retrograde	-4820 Oct 22 j 01:56	13°II37'17		opposition	-4811 Jan 25 j 00:56	29°II45'51	1°17'10
opposition	-4819 Jan 07 j 07:11	12°II15'20	0°36'20	min. Earth dist.	-4811 Jan 26 j 00:43	29°II44'13	29.24632 AU
min. Earth dist.	-4819 Jan 08 j 06:16	12°II13'45	29.19323 AU	direct	-4811 Apr 16 j 09:49	28°II20'38	
direct	-4819 Mar 29 j 06:40	10°II50'02			-4811 Jul 08 j 09:35	0°II	
max. Earth dist.	-4819 Jul 13 j 09:49	13°II19'46	31.19797 AU	max. Earth dist.	-4811 Jul 31 j 00:19	0°II49'39	31.24811 AU
conjunction	-4819 Jul 14 j 10:26	13°II22'04	0°36'36	conjunction	-4811 Aug 01 j 01:54	0°II52'03	1°14'28
minimum elong	-4819 Jul 14 j 10:26	13°II22'04	0°36'50	minimum elong	-4811 Aug 01 j 01:53	0°II52'03	1°14'42
retrograde	-4819 Oct 24 j 11:41	15°II48'51		retrograde	-4811 Nov 10 j 20:23	3°II18'22	
opposition	-4818 Jan 09 j 18:18	14°II26'58	0°41'43	opposition	-4810 Jan 27 j 12:22	1°II56'31	1°21'49
min. Earth dist.	-4818 Jan 10 j 17:35	14°II25'22	29.20332 AU	min. Earth dist.	-4810 Jan 28 j 12:00	1°II54'54	29.25188 AU
direct	-4818 Mar 31 j 19:57	13°II01'43		direct	-4810 Apr 18 j 20:31	0°II31'20	
conjunction	-4818 Jul 16 j 21:44	15°II33'42	0°41'36	conjunction	-4810 Aug 03 j 12:18	3°II02'41	1°18'46
minimum elong	-4818 Jul 16 j 21:44	15°II33'42	0°41'51	minimum elong	-4810 Aug 03 j 12:18	3°II02'41	1°19'01
max. Earth dist.	-4818 Jul 15 j 19:50	15°II31'17	31.20763 AU	max. Earth dist.	-4810 Aug 02 j 12:04	3°II00'25	31.25414 AU
retrograde	-4818 Oct 26 j 23:42	18°II00'26		retrograde	-4810 Nov 13 j 05:48	5°II28'58	
opposition	-4817 Jan 12 j 05:24	16°II38'35	0°47'02	opposition	-4809 Jan 29 j 23:42	4°II07'09	1°26'21
min. Earth dist.	-4817 Jan 13 j 04:43	16°II36'59	29.21262 AU	min. Earth dist.	-4809 Jan 30 j 22:51	4°II05'34	29.25843 AU
direct	-4817 Apr 03 j 08:19	15°II13'21		direct	-4809 Apr 21 j 09:13	2°II42'01	
max. Earth dist.	-4817 Jul 18 j 08:00	17°II42'58	31.21620 AU				
				conjunction	-4809 Aug 05 j 22:29	5°II13'18	1°22'57
conjunction	-4817 Jul 19 j 09:05	17°II45'18	0°46'33	minimum elong	-4809 Aug 05 j 22:28	5°II13'18	1°23'12
minimum elong	-4817 Jul 19 j 09:04	17°II45'18	0°46'47	max. Earth dist.	-4809 Aug 04 j 21:42	5°II10'59	31.26120 AU
retrograde	-4817 Oct 29 j 09:09	20°II11'58		retrograde	-4809 Nov 15 j 18:03	7°II39'36	
opposition	-4816 Jan 14 j 16:40	18°II50'09	0°52'17	opposition	-4808 Feb 01 j 11:05	6°II17'49	1°30'46
min. Earth dist.	-4816 Jan 15 j 16:57	18°II48'29	29.22051 AU	min. Earth dist.	-4808 Feb 02 j 09:29	6°II16'17	29.26600 AU
direct	-4816 Apr 04 j 21:40	17°II24'57		direct	-4808 Apr 22 j 21:24	4°II52'45	
				max. Earth dist.	-4808 Aug 06 j 09:33	7°II21'50	31.26898 AU
conjunction	-4816 Jul 20 j 20:12	19°II56'49	0°51'25				
minimum elong	-4816 Jul 20 j 20:12	19°II56'49	0°51'40	conjunction	-4808 Aug 07 j 08:45	7°II24'00	1°27'01
max. Earth dist.	-4816 Jul 19 j 17:49	19°II54'21	31.22342 AU	minimum elong	-4808 Aug 07 j 08:45	7°II24'00	1°27'17
retrograde	-4816 Oct 30 j 19:37	22°II23'24		retrograde	-4808 Nov 17 j 03:53	9°II50'19	
opposition	-4815 Jan 16 j 03:47	21°II01'37	0°57'27	opposition	-4807 Feb 02 j 22:40	8°II28'35	1°35'03
min. Earth dist.	-4815 Jan 17 j 03:28	20°II59'59	29.22714 AU	min. Earth dist.	-4807 Feb 03 j 21:26	8°II27'01	29.27395 AU
direct	-4815 Apr 07 j 09:56	19°II36'25		direct	-4807 Apr 25 j 10:26	7°II03'36	
max. Earth dist.	-4815 Jul 22 j 05:41	22°II05'49	31.22935 AU				
				conjunction	-4807 Aug 09 j 18:51	9°II34'48	1°30'58
conjunction	-4815 Jul 23 j 07:23	22°II08'13	0°56'13	minimum elong	-4807 Aug 09 j 18:51	9°II34'48	1°31'13
minimum elong	-4815 Jul 23 j 07:23	22°II08'12	0°56'27	max. Earth dist.	-4807 Aug 08 j 19:06	9°II32'34	31.27700 AU
retrograde	-4815 Nov 02 j 03:51	24°II34'44		retrograde	-4807 Nov 19 j 14:43	12°II01'08	
opposition	-4814 Jan 18 j 15:14	23°II12'56	1°02'32	opposition	-4806 Feb 05 j 10:16	10°II39'27	1°39'12
min. Earth dist.	-4814 Jan 19 j 16:01	23°II11'14	29.23260 AU	min. Earth dist.	-4806 Feb 06 j 07:49	10°II37'58	29.28194 AU
direct	-4814 Apr 09 j 21:46	21°II47'45		direct	-4806 Apr 27 j 22:09	9°II14'33	
				max. Earth dist.	-4806 Aug 11 j 06:18	11°II43'34	31.28460 AU
conjunction	-4814 Jul 25 j 18:07	24°II19'26	1°00'55				
minimum elong	-4814 Jul 25 j 18:07	24°II19'26	1°01'10	conjunction	-4806 Aug 12 j 04:56	11°II45'41	1°34'47
max. Earth dist.	-4814 Jul 24 j 15:48	24°II16'59	31.23439 AU	minimum elong	-4806 Aug 12 j 04:56	11°II45'41	1°35'02
retrograde	-4814 Nov 04 j 14:02	26°II45'53		retrograde	-4806 Nov 21 j 23:23	14°II12'03	

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Attention, astronomical year style is used: The year -4805 in astronomical counting style is the year 4806 BCE in historical counting style.

opposition	-4805 Feb 07 j 22:04	12° \mathfrak{D} 50'24	1°43'12		-4797 Mar 07 j 12:23	30° \mathfrak{R} \mathfrak{D}	
min. Earth dist.	-4805 Feb 08 j 20:27	12° \mathfrak{D} 48'52	29.28924 AU	direct	-4797 May 18 j 09:02	28° \mathfrak{D} 50'56	
direct	-4805 Apr 30 j 10:01	11° \mathfrak{D} 25'34			-4797 Jul 24 j 19:50	0° Ω	
conjunction	-4805 Aug 14 j 15:01	13° \mathfrak{D} 56'38	1°38'28	conjunction	-4797 Aug 31 j 20:35	1° Ω 21'07	2°02'23
minimum elong	-4805 Aug 14 j 15:00	13° \mathfrak{D} 56'38	1°38'42	minimum elong	-4797 Aug 31 j 20:34	1° Ω 21'07	2°02'36
max. Earth dist.	-4805 Aug 13 j 16:00	13° \mathfrak{D} 54'29	31.29139 AU	max. Earth dist.	-4797 Aug 31 j 02:06	1° Ω 19'23	31.31328 AU
retrograde	-4805 Nov 24 j 10:02	16° \mathfrak{D} 23'01		retrograde	-4797 Dec 11 j 19:28	3° Ω 47'38	
opposition	-4804 Feb 10 j 09:40	15° \mathfrak{D} 01'23	1°47'04	opposition	-4796 Feb 28 j 09:30	2° Ω 25'45	2°11'57
min. Earth dist.	-4804 Feb 11 j 06:57	14° \mathfrak{D} 59'56	29.29545 AU	min. Earth dist.	-4796 Feb 29 j 03:47	2° Ω 24'30	29.31660 AU
direct	-4804 May 01 j 21:52	13° \mathfrak{D} 36'37		direct	-4796 May 19 j 21:12	1° Ω 01'11	
max. Earth dist.	-4804 Aug 15 j 02:24	16° \mathfrak{D} 05'28	31.29683 AU	max. Earth dist.	-4796 Sep 01 j 11:53	3° Ω 29'36	31.31695 AU
conjunction	-4804 Aug 16 j 01:09	16° \mathfrak{D} 07'36	1°42'00	conjunction	-4796 Sep 02 j 05:52	3° Ω 31'18	2°04'38
minimum elong	-4804 Aug 16 j 01:09	16° \mathfrak{D} 07'36	1°42'15	minimum elong	-4796 Sep 02 j 05:52	3° Ω 31'18	2°04'51
retrograde	-4804 Nov 25 j 19:21	18° \mathfrak{D} 34'01		retrograde	-4796 Dec 13 j 06:19	5° Ω 57'53	
opposition	-4803 Feb 11 j 21:39	17° \mathfrak{D} 12'23	1°50'46	opposition	-4795 Mar 01 j 21:39	4° Ω 36'00	2°14'15
min. Earth dist.	-4803 Feb 12 j 19:44	17° \mathfrak{D} 10'53	29.30037 AU	min. Earth dist.	-4795 Mar 02 j 14:07	4° Ω 34'54	29.32046 AU
direct	-4803 May 04 j 08:41	15° \mathfrak{D} 47'39		direct	-4795 May 22 j 09:17	3° Ω 11'32	
conjunction	-4803 Aug 18 j 11:04	18° \mathfrak{D} 18'32	1°45'23	conjunction	-4795 Sep 04 j 15:05	5° Ω 41'34	2°06'42
minimum elong	-4803 Aug 18 j 11:04	18° \mathfrak{D} 18'32	1°45'37	minimum elong	-4795 Sep 04 j 15:05	5° Ω 41'34	2°06'54
max. Earth dist.	-4803 Aug 17 j 12:53	18° \mathfrak{D} 16'27	31.30104 AU	max. Earth dist.	-4795 Sep 03 j 21:53	5° Ω 39'57	31.32086 AU
retrograde	-4803 Nov 28 j 04:59	20° \mathfrak{D} 44'56		retrograde	-4795 Dec 15 j 16:09	8° Ω 08'17	
opposition	-4802 Feb 14 j 09:35	19° \mathfrak{D} 23'17	1°54'18	opposition	-4794 Mar 04 j 10:01	6° Ω 46'24	2°16'21
min. Earth dist.	-4802 Feb 15 j 06:47	19° \mathfrak{D} 21'51	29.30386 AU	min. Earth dist.	-4794 Mar 05 j 02:44	6° Ω 45'16	29.32446 AU
direct	-4802 May 06 j 21:18	17° \mathfrak{D} 58'35		direct	-4794 May 24 j 19:37	5° Ω 22'02	
conjunction	-4802 Aug 20 j 20:59	20° \mathfrak{D} 29'21	1°48'37	conjunction	-4794 Sep 06 j 08:22	7° Ω 50'29	31.32469 AU
minimum elong	-4802 Aug 20 j 20:58	20° \mathfrak{D} 29'21	1°48'52	minimum elong	-4794 Sep 07 j 00:25	7° Ω 52'00	2°08'34
max. Earth dist.	-4802 Aug 19 j 22:25	20° \mathfrak{D} 27'14	31.30386 AU	max. Earth dist.	-4794 Sep 07 j 00:25	7° Ω 52'00	2°08'47
retrograde	-4802 Nov 30 j 16:05	22° \mathfrak{D} 55'46		retrograde	-4794 Dec 18 j 02:02	10° Ω 18'48	
opposition	-4801 Feb 16 j 21:24	21° \mathfrak{D} 34'04	1°57'41	opposition	-4793 Mar 06 j 22:11	8° Ω 56'57	2°18'16
min. Earth dist.	-4801 Feb 17 j 18:42	21° \mathfrak{D} 32'38	29.30630 AU	min. Earth dist.	-4793 Mar 07 j 13:45	8° Ω 55'54	29.32793 AU
direct	-4801 May 09 j 07:06	20° \mathfrak{D} 09'22		direct	-4793 May 27 j 07:19	7° Ω 32'40	
max. Earth dist.	-4801 Aug 22 j 09:28	22° \mathfrak{D} 38'01	31.30577 AU	conjunction	-4793 Sep 09 j 09:42	10° Ω 02'34	2°10'16
conjunction	-4801 Aug 23 j 06:48	22° \mathfrak{D} 40'01	1°51'42	minimum elong	-4793 Sep 09 j 09:42	10° Ω 02'34	2°10'28
minimum elong	-4801 Aug 23 j 06:48	22° \mathfrak{D} 40'01	1°51'57	max. Earth dist.	-4793 Sep 08 j 17:26	10° Ω 01'02	31.32767 AU
retrograde	-4801 Dec 03 j 01:33	25° \mathfrak{D} 06'26		retrograde	-4793 Dec 20 j 13:50	12° Ω 29'29	
opposition	-4800 Feb 19 j 09:22	23° \mathfrak{D} 44'41	2°00'53	opposition	-4792 Mar 08 j 10:39	11° Ω 07'38	2°19'59
min. Earth dist.	-4800 Feb 20 j 06:16	23° \mathfrak{D} 43'16	29.30778 AU	min. Earth dist.	-4792 Mar 09 j 02:01	11° Ω 06'35	29.33049 AU
direct	-4800 May 10 j 20:26	22° \mathfrak{D} 19'59		direct	-4792 May 28 j 16:23	9° Ω 43'25	
conjunction	-4800 Aug 24 j 16:18	24° \mathfrak{D} 50'30	1°54'38	conjunction	-4792 Sep 10 j 19:02	12° Ω 13'15	2°11'47
minimum elong	-4800 Aug 24 j 16:18	24° \mathfrak{D} 50'30	1°54'52	minimum elong	-4792 Sep 10 j 19:02	12° Ω 13'15	2°11'59
max. Earth dist.	-4800 Aug 23 j 18:31	24° \mathfrak{D} 48'27	31.30705 AU	max. Earth dist.	-4792 Sep 10 j 04:12	12° Ω 11'51	31.32950 AU
retrograde	-4800 Dec 04 j 13:42	27° \mathfrak{D} 16'55		retrograde	-4792 Dec 21 j 23:59	14° Ω 40'17	
opposition	-4799 Feb 20 j 21:20	25° \mathfrak{D} 55'06	2°03'55	opposition	-4791 Mar 10 j 23:14	13° Ω 18'25	2°21'30
min. Earth dist.	-4799 Feb 21 j 17:18	25° \mathfrak{D} 53'45	29.30915 AU	min. Earth dist.	-4791 Mar 11 j 14:07	13° Ω 17'24	29.33156 AU
direct	-4799 May 13 j 08:22	24° \mathfrak{D} 30'25		direct	-4791 May 31 j 05:11	11° Ω 54'17	
max. Earth dist.	-4799 Aug 26 j 05:57	26° \mathfrak{D} 58'56	31.30842 AU	conjunction	-4791 Sep 13 j 04:17	14° Ω 24'01	2°13'06
conjunction	-4799 Aug 27 j 01:54	27° \mathfrak{D} 00'49	1°57'23	minimum elong	-4791 Sep 13 j 04:17	14° Ω 24'01	2°13'18
minimum elong	-4799 Aug 27 j 01:53	27° \mathfrak{D} 00'49	1°57'37	max. Earth dist.	-4791 Sep 12 j 12:51	14° Ω 22'34	31.32985 AU
retrograde	-4799 Dec 06 j 23:18	29° \mathfrak{D} 27'14		retrograde	-4791 Sep 29 j 05:31	15° Ω	
opposition	-4798 Feb 23 j 09:27	28° \mathfrak{D} 05'23	2°06'47	opposition	-4791 Dec 24 j 13:08	16° Ω 51'09	
min. Earth dist.	-4798 Feb 24 j 05:21	28° \mathfrak{D} 04'02	29.31082 AU	opposition	-4790 Mar 13 j 11:47	15° Ω 29'14	2°22'49
direct	-4798 May 15 j 21:09	26° \mathfrak{D} 40'42		min. Earth dist.	-4790 Mar 14 j 01:48	15° Ω 28'18	29.33123 AU
conjunction	-4798 Aug 29 j 11:08	29° \mathfrak{D} 10'59	1°59'58	direct	-4790 Mar 31 j 22:33	15° \mathfrak{R} Ω	
minimum elong	-4798 Aug 29 j 11:07	29° \mathfrak{D} 10'59	2°00'12		-4790 Jun 02 j 16:14	14° Ω 05'09	
max. Earth dist.	-4798 Aug 28 j 15:10	29° \mathfrak{D} 09'07	31.31047 AU		-4790 Aug 01 j 02:40	15° Ω	
retrograde	-4798 Sep 20 j 14:06	0° Ω		conjunction	-4790 Sep 15 j 13:35	16° Ω 34'48	2°14'14
opposition	-4797 Feb 25 j 21:26	0° Ω 15'34	2°09'27	minimum elong	-4790 Sep 15 j 13:35	16° Ω 34'48	2°14'26
min. Earth dist.	-4797 Feb 26 j 15:31	0° Ω 14'20	29.31332 AU	max. Earth dist.	-4790 Sep 14 j 23:41	16° Ω 33'30	31.32865 AU
				retrograde	-4790 Dec 26 j 23:27	19° Ω 02'01	

Planetary Phenomena of Neptune from -4900 through -4400 (UT), Astrodienst AG 7-Dez-2017 14:35, page 8

Attention, astronomical year style is used: The year -4789 in astronomical counting style is the year 4790 BCE in historical counting style.

opposition	-4789 Mar 16 j 00:26	17°04'03	2°23'55	opposition	-4781 Apr 03 j 05:23	5°00'04	2°25'22
min. Earth dist.	-4789 Mar 16 j 14:41	17°03'05	29.32923 AU	min. Earth dist.	-4781 Apr 03 j 11:21	5°00'36	29.30665 AU
direct	-4789 Jun 05 j 04:26	16°01'00		direct	-4781 Jun 23 j 00:25	3°00'40	18
conjunction	-4789 Sep 17 j 22:43	18°04'53	2°15'11	conjunction	-4781 Oct 04 j 21:59	6°00'08	2°15'45
minimum elong	-4789 Sep 17 j 22:43	18°04'53	2°15'21	minimum elong	-4781 Oct 04 j 22:00	6°00'08	2°15'52
max. Earth dist.	-4789 Sep 17 j 08:33	18°04'41	31.32601 AU	max. Earth dist.	-4781 Oct 04 j 16:24	6°00'08	31.30395 AU
retrograde	-4789 Dec 29 j 10:56	21°01'12	50	retrograde	-4780 Jan 15 j 23:37	8°00'37	11
opposition	-4788 Mar 17 j 12:51	19°05'04	2°24'50	opposition	-4780 Apr 04 j 18:16	7°00'14	2°24'37
min. Earth dist.	-4788 Mar 18 j 01:34	19°04'56	29.32599 AU	min. Earth dist.	-4780 Apr 05 j 00:11	7°00'14	29.30448 AU
direct	-4788 Jun 06 j 16:34	18°02'6	45	direct	-4780 Jun 24 j 11:28	5°00'51	03
conjunction	-4788 Sep 19 j 07:52	20°05'6	10	conjunction	-4780 Oct 06 j 06:55	8°00'19	2°14'56
minimum elong	-4788 Sep 19 j 07:52	20°05'6	10	minimum elong	-4780 Oct 06 j 06:55	8°00'19	2°15'03
max. Earth dist.	-4788 Sep 18 j 18:59	20°05'4	57	max. Earth dist.	-4780 Oct 06 j 01:25	8°00'19	31.30147 AU
retrograde	-4788 Dec 30 j 21:00	23°02'3	32	retrograde	-4779 Jan 17 j 12:25	10°00'48	00
opposition	-4787 Mar 20 j 01:36	22°01'24	2°25'32	opposition	-4779 Apr 07 j 07:11	9°00'25	2°23'38
min. Earth dist.	-4787 Mar 20 j 14:32	22°00'32	29.32202 AU	min. Earth dist.	-4779 Apr 07 j 11:23	9°00'25	29.30145 AU
direct	-4787 Jun 09 j 05:40	20°03'7	24	direct	-4779 Jun 26 j 23:03	8°00'01	54
conjunction	-4787 Sep 21 j 16:44	23°00'6	40	conjunction	-4779 Oct 08 j 15:54	10°00'30	2°13'56
minimum elong	-4787 Sep 21 j 16:44	23°00'6	40	minimum elong	-4779 Oct 08 j 15:54	10°00'30	2°14'01
max. Earth dist.	-4787 Sep 21 j 04:35	23°00'5	31	max. Earth dist.	-4779 Oct 08 j 11:28	10°00'30	31.29776 AU
retrograde	-4786 Jan 02 j 08:03	25°03'4	06	retrograde	-4778 Jan 19 j 23:55	12°00'58	55
opposition	-4786 Mar 22 j 14:09	24°01'1	53	opposition	-4778 Apr 09 j 20:16	11°00'36	2°22'28
min. Earth dist.	-4786 Mar 23 j 01:04	24°01'1	09	min. Earth dist.	-4778 Apr 10 j 00:47	11°00'36	29.29709 AU
direct	-4786 Jun 11 j 18:39	22°04'7	53	direct	-4778 Jun 29 j 11:22	10°00'12	48
conjunction	-4786 Sep 24 j 01:40	25°01'7	02	conjunction	-4778 Oct 11 j 01:00	12°00'41	2°12'44
minimum elong	-4786 Sep 24 j 01:40	25°01'7	02	minimum elong	-4778 Oct 11 j 01:00	12°00'41	2°12'49
max. Earth dist.	-4786 Sep 23 j 14:21	25°01'5	58	max. Earth dist.	-4778 Oct 10 j 21:08	12°00'40	31.29277 AU
retrograde	-4785 Jan 04 j 17:12	27°04'4	34	retrograde	-4777 Jan 22 j 11:43	15°00'09	50
opposition	-4785 Mar 25 j 02:40	26°02'2	17	opposition	-4777 Apr 12 j 09:01	13°00'47	10
min. Earth dist.	-4785 Mar 25 j 13:30	26°02'1	33	min. Earth dist.	-4777 Apr 12 j 11:51	13°00'46	29.29125 AU
direct	-4785 Jun 14 j 05:17	24°05'8	18	direct	-4777 Jul 02 j 00:02	12°00'23	42
conjunction	-4785 Sep 26 j 10:38	27°02'7	21	conjunction	-4777 Oct 13 j 10:03	14°00'52	2°11'21
minimum elong	-4785 Sep 26 j 10:38	27°02'7	21	minimum elong	-4777 Oct 13 j 10:03	14°00'52	2°11'26
max. Earth dist.	-4785 Sep 26 j 00:58	27°02'6	26	max. Earth dist.	-4777 Oct 13 j 06:28	14°00'51	31.28623 AU
retrograde	-4784 Jan 07 j 02:22	29°05'4	58	retrograde	-4776 Jan 24 j 22:01	17°00'20	47
opposition	-4784 Mar 26 j 15:14	28°03'2	37	opposition	-4776 Apr 13 j 22:06	15°00'58	2°19'30
min. Earth dist.	-4784 Mar 27 j 00:17	28°03'2	01	min. Earth dist.	-4776 Apr 14 j 01:10	15°00'57	29.28410 AU
direct	-4784 Jun 15 j 17:29	27°00'8	42	direct	-4776 Jul 03 j 11:02	14°00'34	34
conjunction	-4784 Sep 27 j 19:20	29°03'7	38	conjunction	-4776 Oct 14 j 19:00	17°00'02	2°09'47
minimum elong	-4784 Sep 27 j 19:21	29°03'7	38	minimum elong	-4776 Oct 14 j 19:00	17°00'02	2°09'52
max. Earth dist.	-4784 Sep 27 j 09:58	29°03'6	45	max. Earth dist.	-4776 Oct 14 j 17:00	17°00'02	31.27863 AU
retrograde	-4784 Oct 07 j 17:02	0°00'		retrograde	-4775 Jan 26 j 07:40	19°00'31	40
opposition	-4783 Jan 08 j 14:00	2°00'05	23	opposition	-4775 Apr 16 j 11:06	18°00'08	2°17'44
min. Earth dist.	-4783 Mar 29 j 03:58	0°00'43	00	min. Earth dist.	-4775 Apr 16 j 12:36	18°00'08	29.27598 AU
direct	-4783 Mar 29 j 12:11	0°00'42	27	direct	-4775 Jul 05 j 23:55	16°00'45	22
conjunction	-4783 Apr 26 j 01:28	30°00'0		conjunction	-4775 Oct 17 j 03:52	19°00'13	2°08'02
minimum elong	-4783 Jun 18 j 02:39	29°00'19	08	minimum elong	-4775 Oct 17 j 03:52	19°00'13	2°08'06
max. Earth dist.	-4783 Aug 07 j 18:28	0°00'		max. Earth dist.	-4775 Oct 17 j 01:54	19°00'13	31.27036 AU
retrograde	-4783 Sep 30 j 04:17	1°00'47	59	retrograde	-4774 Jan 28 j 19:29	21°00'42	28
opposition	-4783 Sep 30 j 04:17	1°00'47	59	opposition	-4774 Apr 18 j 23:59	20°00'19	2°15'46
max. Earth dist.	-4783 Sep 29 j 20:57	1°00'47	19	min. Earth dist.	-4774 Apr 19 j 00:51	20°00'19	29.26773 AU
retrograde	-4782 Jan 11 j 00:02	4°00'15	53	direct	-4774 Jul 08 j 09:37	18°00'56	04
opposition	-4782 Mar 31 j 16:40	2°00'53	27	conjunction	-4774 Oct 19 j 12:49	21°00'24	2°06'06
min. Earth dist.	-4782 Mar 31 j 23:53	2°00'52	58	minimum elong	-4774 Oct 19 j 12:50	21°00'24	2°06'09
direct	-4782 Jun 20 j 14:50	1°00'29	40	max. Earth dist.	-4774 Oct 19 j 12:56	21°00'24	31.26219 AU
conjunction	-4782 Oct 02 j 13:02	3°00'58	26	retrograde	-4773 Jan 31 j 05:11	23°00'53	12
minimum elong	-4782 Oct 02 j 13:02	3°00'58	26	opposition	-4773 Apr 21 j 12:52	22°00'30	2°13'36
max. Earth dist.	-4782 Oct 02 j 05:36	3°00'57	43	min. Earth dist.	-4773 Apr 21 j 12:33	22°00'30	29.25970 AU
retrograde	-4781 Jan 13 j 13:03	6°00'26	28	direct	-4773 Jul 10 j 21:53	21°00'06	45

Attention, astronomical year style is used: The year -4773 in astronomical counting style is the year 4774 BCE in historical counting style.

conjunction	-4773 Oct 21 j 21:33	23° \mathring{M} 34'39	2°03'59	direct	-4765 Jul 28 j 13:36	8° \mathring{A} 36'16	
minimum elong	-4773 Oct 21 j 21:34	23° \mathring{M} 34'39	2°04'01				
max. Earth dist.	-4773 Oct 21 j 21:50	23° \mathring{M} 34'40	31.25464 AU	conjunction	-4765 Nov 07 j 22:34	11° \mathring{A} 03'44	1°40'51
retrograde	-4772 Feb 02 j 17:56	26° \mathring{M} 03'55		minimum elong	-4765 Nov 07 j 22:35	11° \mathring{A} 03'44	1°40'49
opposition	-4772 Apr 23 j 01:43	24° \mathring{M} 40'47	2°11'15	max. Earth dist.	-4765 Nov 08 j 07:12	11° \mathring{A} 04'33	31.20798 AU
min. Earth dist.	-4772 Apr 22 j 23:46	24° \mathring{M} 40'55	29.25263 AU	retrograde	-4764 Feb 20 j 16:11	13° \mathring{A} 34'23	
direct	-4772 Jul 12 j 07:07	23° \mathring{M} 17'25		opposition	-4764 May 11 j 09:53	12° \mathring{A} 10'50	1°45'50
				min. Earth dist.	-4764 May 11 j 01:10	12° \mathring{A} 11'25	29.20434 AU
conjunction	-4772 Oct 23 j 06:32	25° \mathring{M} 45'15	2°01'41	direct	-4764 Jul 30 j 01:58	10° \mathring{A} 47'57	
minimum elong	-4772 Oct 23 j 06:32	25° \mathring{M} 45'15	2°01'44				
max. Earth dist.	-4772 Oct 23 j 08:54	25° \mathring{M} 45'29	31.24806 AU	conjunction	-4764 Nov 09 j 07:58	13° \mathring{A} 15'20	1°37'15
retrograde	-4771 Feb 04 j 04:38	28° \mathring{M} 14'42		minimum elong	-4764 Nov 09 j 07:59	13° \mathring{A} 15'20	1°37'13
opposition	-4771 Apr 25 j 14:44	26° \mathring{M} 51'30	2°08'42	max. Earth dist.	-4764 Nov 09 j 16:16	13° \mathring{A} 16'07	31.19862 AU
min. Earth dist.	-4771 Apr 25 j 12:14	26° \mathring{M} 51'40	29.24653 AU	retrograde	-4763 Feb 22 j 04:42	15° \mathring{A} 46'07	
direct	-4771 Jul 14 j 17:17	25° \mathring{M} 28'12		opposition	-4763 May 13 j 22:59	14° \mathring{A} 22'28	1°41'54
				min. Earth dist.	-4763 May 13 j 13:14	14° \mathring{A} 23'08	29.19440 AU
conjunction	-4771 Oct 25 j 15:20	27° \mathring{M} 55'58	1°59'13	direct	-4763 Aug 01 j 11:45	12° \mathring{A} 59'35	
minimum elong	-4771 Oct 25 j 15:21	27° \mathring{M} 55'58	1°59'14				
max. Earth dist.	-4771 Oct 25 j 18:21	27° \mathring{M} 56'15	31.24259 AU	conjunction	-4763 Nov 11 j 17:27	15° \mathring{A} 26'52	1°33'31
	-4771 Dec 29 j 01:38	0° \mathring{A}		minimum elong	-4763 Nov 11 j 17:27	15° \mathring{A} 26'52	1°33'28
retrograde	-4770 Feb 06 j 17:56	0° \mathring{A} 25'35		max. Earth dist.	-4763 Nov 12 j 03:20	15° \mathring{A} 27'48	31.18825 AU
	-4770 Mar 19 j 19:30	30° \mathring{R} \mathring{M}		retrograde	-4762 Feb 24 j 15:23	17° \mathring{A} 57'47	
opposition	-4770 Apr 28 j 03:35	29° \mathring{M} 02'21	2°05'58	opposition	-4762 May 16 j 12:06	16° \mathring{A} 34'01	1°37'50
min. Earth dist.	-4770 Apr 27 j 23:01	29° \mathring{M} 02'39	29.24135 AU	min. Earth dist.	-4762 May 16 j 02:16	16° \mathring{A} 34'41	29.18367 AU
direct	-4770 Jul 17 j 04:22	27° \mathring{M} 39'07		direct	-4762 Aug 03 j 22:37	15° \mathring{A} 11'07	
	-4770 Oct 25 j 00:04	0° \mathring{A}					
conjunction	-4770 Oct 28 j 00:22	0° \mathring{A} 06'50	1°56'34	conjunction	-4762 Nov 14 j 02:52	17° \mathring{A} 38'18	1°29'39
minimum elong	-4770 Oct 28 j 00:23	0° \mathring{A} 06'51	1°56'36	minimum elong	-4762 Nov 14 j 02:52	17° \mathring{A} 38'18	1°29'35
max. Earth dist.	-4770 Oct 28 j 04:38	0° \mathring{A} 07'15	31.23767 AU	max. Earth dist.	-4762 Nov 14 j 13:12	17° \mathring{A} 39'17	31.17755 AU
retrograde	-4769 Feb 09 j 06:27	2° \mathring{A} 36'38		retrograde	-4761 Feb 27 j 04:24	20° \mathring{A} 09'20	
opposition	-4769 Apr 30 j 16:28	1° \mathring{A} 13'22	2°03'03	opposition	-4761 May 19 j 00:54	18° \mathring{A} 45'27	1°33'38
min. Earth dist.	-4769 Apr 30 j 11:55	1° \mathring{A} 13'40	29.23660 AU	min. Earth dist.	-4761 May 18 j 13:16	18° \mathring{A} 46'15	29.17299 AU
	-4769 Jun 24 j 23:30	30° \mathring{R} \mathring{M}		direct	-4761 Aug 06 j 09:44	17° \mathring{A} 22'33	
direct	-4769 Jul 19 j 15:43	29° \mathring{M} 50'13		conjunction	-4761 Nov 16 j 12:19	19° \mathring{A} 49'40	1°25'38
	-4769 Aug 12 j 21:34	0° \mathring{A}		minimum elong	-4761 Nov 16 j 12:20	19° \mathring{A} 49'40	1°25'34
				max. Earth dist.	-4761 Nov 16 j 23:44	19° \mathring{A} 50'45	31.16707 AU
conjunction	-4769 Oct 30 j 09:25	2° \mathring{A} 17'54	1°53'45	retrograde	-4760 Feb 29 j 16:47	22° \mathring{A} 20'51	
minimum elong	-4769 Oct 30 j 09:26	2° \mathring{A} 17'54	1°53'46	opposition	-4760 May 20 j 13:59	20° \mathring{A} 56'51	1°29'17
max. Earth dist.	-4769 Oct 30 j 14:49	2° \mathring{A} 18'25	31.23313 AU	min. Earth dist.	-4760 May 20 j 02:16	20° \mathring{A} 57'39	29.16288 AU
retrograde	-4768 Feb 11 j 19:13	4° \mathring{A} 47'53		direct	-4760 Aug 07 j 20:31	19° \mathring{A} 33'57	
opposition	-4768 May 02 j 05:25	3° \mathring{A} 24'34	1°59'57				
min. Earth dist.	-4768 May 01 j 22:52	3° \mathring{A} 25'01	29.23188 AU	conjunction	-4760 Nov 17 j 21:46	22° \mathring{A} 01'01	1°21'31
direct	-4768 Jul 21 j 03:35	2° \mathring{A} 01'30		minimum elong	-4760 Nov 17 j 21:47	22° \mathring{A} 01'01	1°21'26
				max. Earth dist.	-4760 Nov 18 j 10:34	22° \mathring{A} 02'14	31.15751 AU
conjunction	-4768 Oct 31 j 18:27	4° \mathring{A} 29'09	1°50'46	retrograde	-4759 Mar 03 j 05:35	24° \mathring{A} 32'20	
minimum elong	-4768 Oct 31 j 18:27	4° \mathring{A} 29'09	1°50'46	opposition	-4759 May 23 j 02:54	23° \mathring{A} 08'16	1°24'48
max. Earth dist.	-4768 Nov 01 j 00:16	4° \mathring{A} 29'42	31.22826 AU	min. Earth dist.	-4759 May 22 j 13:01	23° \mathring{A} 09'13	29.15370 AU
retrograde	-4767 Feb 13 j 06:36	6° \mathring{A} 59'19		direct	-4759 Aug 10 j 08:09	21° \mathring{A} 45'23	
opposition	-4767 May 04 j 18:38	5° \mathring{A} 35'58	1°56'40				
min. Earth dist.	-4767 May 04 j 12:13	5° \mathring{A} 36'24	29.22674 AU	conjunction	-4759 Nov 20 j 07:19	24° \mathring{A} 12'26	1°17'16
direct	-4767 Jul 23 j 14:20	4° \mathring{A} 12'59		minimum elong	-4759 Nov 20 j 07:20	24° \mathring{A} 12'26	1°17'10
				max. Earth dist.	-4759 Nov 20 j 20:33	24° \mathring{A} 13'41	31.14884 AU
conjunction	-4767 Nov 03 j 03:49	6° \mathring{A} 40'34	1°47'37	retrograde	-4758 Mar 05 j 17:59	26° \mathring{A} 43'54	
minimum elong	-4767 Nov 03 j 03:49	6° \mathring{A} 40'34	1°47'36	opposition	-4758 May 25 j 15:46	25° \mathring{A} 19'47	1°20'12
max. Earth dist.	-4767 Nov 03 j 11:14	6° \mathring{A} 41'17	31.22275 AU	min. Earth dist.	-4758 May 25 j 01:52	25° \mathring{A} 20'44	29.14553 AU
retrograde	-4766 Feb 15 j 17:41	9° \mathring{A} 10'54		direct	-4758 Aug 12 j 18:41	23° \mathring{A} 56'57	
opposition	-4766 May 07 j 07:34	7° \mathring{A} 47'31	1°53'13				
min. Earth dist.	-4766 May 06 j 23:51	7° \mathring{A} 48'02	29.22060 AU	conjunction	-4758 Nov 22 j 17:04	26° \mathring{A} 23'58	1°12'53
direct	-4766 Jul 26 j 03:22	6° \mathring{A} 24'35		minimum elong	-4758 Nov 22 j 17:05	26° \mathring{A} 23'58	1°12'48
				max. Earth dist.	-4758 Nov 23 j 08:10	26° \mathring{A} 25'24	31.14113 AU
conjunction	-4766 Nov 05 j 13:07	8° \mathring{A} 52'07	1°44'19	retrograde	-4757 Mar 08 j 06:09	28° \mathring{A} 55'37	
minimum elong	-4766 Nov 05 j 13:08	8° \mathring{A} 52'07	1°44'18	opposition	-4757 May 28 j 04:38	27° \mathring{A} 31'28	1°15'28
max. Earth dist.	-4766 Nov 05 j 20:08	8° \mathring{A} 52'47	31.21606 AU	min. Earth dist.	-4757 May 27 j 13:08	27° \mathring{A} 32'31	29.13802 AU
retrograde	-4765 Feb 18 j 06:31	11° \mathring{A} 22'37		direct	-4757 Aug 15 j 07:28	26° \mathring{A} 08'41	
opposition	-4765 May 09 j 20:44	9° \mathring{A} 59'10	1°49'36				
min. Earth dist.	-4765 May 09 j 12:44	9° \mathring{A} 59'42	29.21325 AU	conjunction	-4757 Nov 25 j 02:36	28° \mathring{A} 35'42	1°08'24

Attention, astronomical year style is used: The year -4757 in astronomical counting style is the year 4758 BCE in historical counting style.

minimum elong	-4757 Nov 25 j 02:36	28° \mathring{A} 35'42	1°08'18			-4749 Nov 07 j 15:05	15° \mathring{M}	
max. Earth dist.	-4757 Nov 25 j 17:37	28° \mathring{A} 37'07	31.13394 AU					
	-4756 Jan 03 j 10:25	0° \mathring{M}		conjunction		-4749 Dec 12 j 12:44	16° \mathring{M} 15'36	0°29'24
retrograde	-4756 Mar 09 j 19:31	1° \mathring{M} 07'33		minimum elong		-4749 Dec 12 j 12:45	16° \mathring{M} 15'36	0°29'14
	-4756 May 19 j 10:55	30° \mathring{R} \mathring{A}		max. Earth dist.		-4749 Dec 13 j 09:09	16° \mathring{M} 17'31	31.05450 AU
opposition	-4756 May 29 j 17:39	29° \mathring{A} 43'21	1°10'37	retrograde		-4748 Mar 28 j 00:38	18° \mathring{M} 48'37	
min. Earth dist.	-4756 May 29 j 01:42	29° \mathring{A} 44'26	29.13100 AU	min. Earth dist.		-4748 Jun 16 j 04:31	17° \mathring{M} 25'17	29.04866 AU
direct	-4756 Aug 16 j 17:28	28° \mathring{A} 20'38		opposition		-4748 Jun 17 j 00:44	17° \mathring{M} 23'54	0°28'36
	-4756 Nov 05 j 04:29	0° \mathring{M}		direct		-4748 Sep 03 j 10:37	16° \mathring{M} 01'12	
conjunction	-4756 Nov 26 j 12:34	0° \mathring{M} 47'39	1°03'49	conjunction		-4748 Dec 13 j 23:13	18° \mathring{M} 28'09	0°24'16
minimum elong	-4756 Nov 26 j 12:34	0° \mathring{M} 47'40	1°03'43	minimum elong		-4748 Dec 13 j 23:13	18° \mathring{M} 28'09	0°24'05
max. Earth dist.	-4756 Nov 27 j 05:23	0° \mathring{M} 49'15	31.12696 AU	max. Earth dist.		-4748 Dec 14 j 19:20	18° \mathring{M} 30'03	31.04259 AU
retrograde	-4755 Mar 12 j 06:05	3° \mathring{M} 19'42		retrograde		-4747 Mar 30 j 13:41	21° \mathring{M} 01'17	
opposition	-4755 Jun 01 j 06:35	1° \mathring{M} 55'29	1°05'39	opposition		-4747 Jun 19 j 13:24	19° \mathring{M} 36'28	0°23'04
min. Earth dist.	-4755 May 31 j 13:56	1° \mathring{M} 56'37	29.12385 AU	min. Earth dist.		-4747 Jun 18 j 16:54	19° \mathring{M} 37'52	29.03731 AU
direct	-4755 Aug 19 j 05:18	0° \mathring{M} 32'50		direct		-4747 Sep 05 j 20:55	18° \mathring{M} 13'44	
conjunction	-4755 Nov 28 j 22:31	2° \mathring{M} 59'52	0°59'08	conjunction		-4747 Dec 16 j 09:56	20° \mathring{M} 40'41	0°19'05
minimum elong	-4755 Nov 28 j 22:32	2° \mathring{M} 59'52	0°59'00	minimum elong		-4747 Dec 16 j 09:56	20° \mathring{M} 40'41	0°18'54
max. Earth dist.	-4755 Nov 29 j 15:02	3° \mathring{M} 01'26	31.11970 AU	max. Earth dist.		-4747 Dec 17 j 07:47	20° \mathring{M} 42'45	31.03170 AU
retrograde	-4754 Mar 14 j 19:20	5° \mathring{M} 32'05		retrograde		-4746 Apr 02 j 00:44	23° \mathring{M} 13'57	
opposition	-4754 Jun 03 j 19:32	4° \mathring{M} 07'51	1°00'35	min. Earth dist.		-4746 Jun 21 j 04:39	21° \mathring{M} 50'31	29.02694 AU
min. Earth dist.	-4754 Jun 03 j 02:03	4° \mathring{M} 09'03	29.11622 AU	opposition		-4746 Jun 22 j 01:58	21° \mathring{M} 49'04	0°17'31
direct	-4754 Aug 21 j 14:50	2° \mathring{M} 45'15		direct		-4746 Sep 08 j 09:19	20° \mathring{M} 26'20	
conjunction	-4754 Dec 01 j 08:45	5° \mathring{M} 12'17	0°54'21	conjunction		-4746 Dec 18 j 20:31	22° \mathring{M} 53'17	0°13'52
minimum elong	-4754 Dec 01 j 08:45	5° \mathring{M} 12'17	0°54'13	minimum elong		-4746 Dec 18 j 20:32	22° \mathring{M} 53'17	0°13'41
max. Earth dist.	-4754 Dec 02 j 02:27	5° \mathring{M} 13'58	31.11150 AU	behind sun begin		-4746 Dec 18 j 17:00	22° \mathring{M} 52'58	
retrograde	-4753 Mar 17 j 06:46	7° \mathring{M} 44'42		behind sun end		-4746 Dec 19 j 00:04	22° \mathring{M} 53'36	
opposition	-4753 Jun 06 j 08:28	6° \mathring{M} 20'25	0°55'26	max. Earth dist.		-4746 Dec 19 j 18:13	22° \mathring{M} 55'20	31.02196 AU
min. Earth dist.	-4753 Jun 05 j 15:17	6° \mathring{M} 21'36	29.10741 AU	retrograde		-4745 Apr 04 j 14:18	25° \mathring{M} 26'40	
direct	-4753 Aug 24 j 01:16	4° \mathring{M} 57'51		opposition		-4745 Jun 24 j 14:30	24° \mathring{M} 01'44	0°11'55
conjunction	-4753 Dec 03 j 19:05	7° \mathring{M} 24'54	0°49'29	min. Earth dist.		-4745 Jun 23 j 16:12	24° \mathring{M} 03'15	29.01777 AU
minimum elong	-4753 Dec 03 j 19:05	7° \mathring{M} 24'54	0°49'21	direct		-4745 Sep 10 j 19:46	22° \mathring{M} 39'00	
max. Earth dist.	-4753 Dec 04 j 12:47	7° \mathring{M} 26'34	31.10220 AU	conjunction		-4745 Dec 21 j 07:22	25° \mathring{M} 05'59	0°08'39
retrograde	-4752 Mar 18 j 20:22	9° \mathring{M} 57'27		minimum elong		-4745 Dec 21 j 07:22	25° \mathring{M} 05'59	0°08'27
opposition	-4752 Jun 07 j 21:26	8° \mathring{M} 33'07	0°50'12	behind sun begin		-4745 Dec 21 j 01:42	25° \mathring{M} 05'28	
min. Earth dist.	-4752 Jun 07 j 03:00	8° \mathring{M} 34'23	29.09738 AU	behind sun end		-4745 Dec 21 j 13:02	25° \mathring{M} 06'30	
direct	-4752 Aug 25 j 12:13	7° \mathring{M} 10'33		max. Earth dist.		-4745 Dec 22 j 06:27	25° \mathring{M} 08'10	31.01324 AU
conjunction	-4752 Dec 05 j 05:23	9° \mathring{M} 37'36	0°44'33	retrograde		-4744 Apr 06 j 01:46	27° \mathring{M} 39'30	
minimum elong	-4752 Dec 05 j 05:23	9° \mathring{M} 37'36	0°44'25	min. Earth dist.		-4744 Jun 25 j 04:53	26° \mathring{M} 16'03	29.00950 AU
max. Earth dist.	-4752 Dec 05 j 23:26	9° \mathring{M} 39'18	31.09146 AU	opposition		-4744 Jun 26 j 03:08	26° \mathring{M} 14'31	0°06'18
retrograde	-4751 Mar 21 j 09:03	12° \mathring{M} 10'18		direct		-4744 Sep 12 j 06:34	24° \mathring{M} 51'49	
opposition	-4751 Jun 10 j 10:31	10° \mathring{M} 45'53	0°44'53	conjunction		-4744 Dec 22 j 18:15	27° \mathring{M} 18'50	0°03'24
min. Earth dist.	-4751 Jun 09 j 16:42	10° \mathring{M} 47'06	29.08599 AU	minimum elong		-4744 Dec 22 j 18:15	27° \mathring{M} 18'50	0°03'12
direct	-4751 Aug 27 j 22:34	9° \mathring{M} 23'18		behind sun begin		-4744 Dec 22 j 11:50	27° \mathring{M} 18'15	
conjunction	-4751 Dec 07 j 15:56	11° \mathring{M} 50'19	0°39'34	behind sun end		-4744 Dec 23 j 00:40	27° \mathring{M} 19'24	
minimum elong	-4751 Dec 07 j 15:56	11° \mathring{M} 50'19	0°39'25	max. Earth dist.		-4744 Dec 23 j 17:39	27° \mathring{M} 21'02	31.00545 AU
max. Earth dist.	-4751 Dec 08 j 10:45	11° \mathring{M} 52'06	31.07964 AU	retrograde		-4743 Apr 08 j 14:46	29° \mathring{M} 52'29	
retrograde	-4750 Mar 23 j 22:09	14° \mathring{M} 23'08		opposition		-4743 Jun 28 j 15:40	28° \mathring{M} 27'29	0°00'40
opposition	-4750 Jun 12 j 23:10	12° \mathring{M} 58'37	0°39'31	min. Earth dist.		-4743 Jun 27 j 16:11	28° \mathring{M} 29'06	29.00191 AU
min. Earth dist.	-4750 Jun 12 j 03:55	12° \mathring{M} 59'56	29.07364 AU	desc. node		-4743 Aug 10 j 18:59	27° \mathring{M} 24'37	
direct	-4750 Aug 30 j 09:58	11° \mathring{M} 36'00		direct		-4743 Sep 14 j 17:02	27° \mathring{M} 04'47	
conjunction	-4750 Dec 10 j 02:19	14° \mathring{M} 02'59	0°34'31	conjunction		-4743 Dec 25 j 05:25	29° \mathring{M} 31'52	0°-1'-59
minimum elong	-4750 Dec 10 j 02:19	14° \mathring{M} 02'59	0°34'21	minimum elong		-4743 Dec 25 j 05:24	29° \mathring{M} 31'52	0°02'13
max. Earth dist.	-4750 Dec 10 j 21:00	14° \mathring{M} 04'45	31.06703 AU	behind sun begin		-4743 Dec 24 j 22:56	29° \mathring{M} 31'17	
	-4749 Jan 04 j 19:04	15° \mathring{M}		behind sun end		-4743 Dec 25 j 11:51	29° \mathring{M} 32'26	
retrograde	-4749 Mar 26 j 11:20	16° \mathring{M} 35'55		max. Earth dist.		-4743 Dec 26 j 05:07	29° \mathring{M} 34'06	30.99786 AU
opposition	-4749 Jun 15 j 12:02	15° \mathring{M} 11'17	0°34'05			-4742 Jan 06 j 16:29	0° \mathring{A}	
min. Earth dist.	-4749 Jun 14 j 17:13	15° \mathring{M} 12'35	29.06100 AU	retrograde		-4742 Apr 11 j 03:01	2° \mathring{A} 05'39	
	-4749 Jun 22 j 09:33	15° \mathring{R} \mathring{M}		min. Earth dist.		-4742 Jun 30 j 05:28	0° \mathring{A} 42'12	28.99438 AU
direct	-4749 Sep 01 j 21:13	13° \mathring{M} 48'38		opposition		-4742 Jul 01 j 04:09	0° \mathring{A} 40'38	0°-4'-58
						-4742 Jul 26 j 20:27	30° \mathring{R} \mathring{M}	

Attention, astronomical year style is used: The year -4742 in astronomical counting style is the year 4743 BCE in historical counting style.

direct	-4742 Sep 17 j 02:30	29° $\overline{16}$ 17'57		min. Earth dist.	-4734 Jul 18 j 06:16	18° $\overline{2}$ 30'49	28.91646 AU
	-4742 Nov 06 j 06:11	0° $\overline{2}$		opposition	-4734 Jul 19 j 06:51	18° $\overline{2}$ 29'07	0°-49'-12
				direct	-4734 Oct 04 j 21:50	17° $\overline{2}$ 06'09	
conjunction	-4742 Dec 27 j 16:44	1° $\overline{2}$ 45'05	0°-7'-16				
minimum elong	-4742 Dec 27 j 16:45	1° $\overline{2}$ 45'05	0°07'29	conjunction	-4733 Jan 14 j 14:35	19° $\overline{2}$ 33'41	0°-48'-26
behind sun begin	-4742 Dec 27 j 10:51	1° $\overline{2}$ 44'33		minimum elong	-4733 Jan 14 j 14:34	19° $\overline{2}$ 33'41	0°48'41
behind sun end	-4742 Dec 27 j 22:38	1° $\overline{2}$ 45'37		max. Earth dist.	-4733 Jan 15 j 16:07	19° $\overline{2}$ 36'06	30.91197 AU
max. Earth dist.	-4742 Dec 28 j 17:07	1° $\overline{2}$ 47'23	30.99024 AU	retrograde	-4733 May 02 j 00:57	22° $\overline{2}$ 08'16	
retrograde	-4741 Apr 13 j 16:46	4° $\overline{2}$ 19'01		opposition	-4733 Jul 21 j 19:01	20° $\overline{2}$ 42'50	0°-54'-29
opposition	-4741 Jul 03 j 16:38	2° $\overline{2}$ 53'59	0°-10'-36	min. Earth dist.	-4733 Jul 20 j 19:06	20° $\overline{2}$ 44'30	28.90899 AU
min. Earth dist.	-4741 Jul 02 j 16:45	2° $\overline{2}$ 55'38	28.98646 AU	direct	-4733 Oct 07 j 07:03	19° $\overline{2}$ 19'51	
direct	-4741 Sep 19 j 13:32	1° $\overline{2}$ 31'18					
				conjunction	-4732 Jan 17 j 02:37	21° $\overline{2}$ 47'28	0°-53'-20
conjunction	-4741 Dec 30 j 04:01	3° $\overline{2}$ 58'29	0°-12'-31	minimum elong	-4732 Jan 17 j 02:36	21° $\overline{2}$ 47'28	0°53'35
minimum elong	-4741 Dec 30 j 04:01	3° $\overline{2}$ 58'29	0°12'44	max. Earth dist.	-4732 Jan 18 j 04:55	21° $\overline{2}$ 49'57	30.90522 AU
behind sun begin	-4741 Dec 29 j 23:55	3° $\overline{2}$ 58'07		retrograde	-4732 May 03 j 14:21	24° $\overline{2}$ 22'08	
behind sun end	-4741 Dec 30 j 08:06	3° $\overline{2}$ 58'52		min. Earth dist.	-4732 Jul 22 j 05:50	22° $\overline{2}$ 58'28	28.90287 AU
max. Earth dist.	-4741 Dec 31 j 03:50	4° $\overline{2}$ 00'44	30.98189 AU	opposition	-4732 Jul 23 j 07:02	22° $\overline{2}$ 56'42	0°-59'-42
retrograde	-4740 Apr 15 j 06:38	6° $\overline{2}$ 32'33		direct	-4732 Oct 08 j 17:51	21° $\overline{2}$ 33'42	
min. Earth dist.	-4740 Jul 04 j 06:20	5° $\overline{2}$ 09'04	28.97773 AU				
opposition	-4740 Jul 05 j 05:20	5° $\overline{2}$ 07'29	0°-16'-14	conjunction	-4731 Jan 18 j 14:50	24° $\overline{2}$ 01'25	0°-58'-10
direct	-4740 Sep 21 j 00:15	3° $\overline{2}$ 44'47		minimum elong	-4731 Jan 18 j 14:49	24° $\overline{2}$ 01'25	0°58'26
				max. Earth dist.	-4731 Jan 19 j 16:37	24° $\overline{2}$ 03'51	30.89960 AU
conjunction	-4740 Dec 31 j 15:44	6° $\overline{2}$ 12'02	0°-17'-45	retrograde	-4731 May 06 j 03:32	26° $\overline{2}$ 36'10	
minimum elong	-4740 Dec 31 j 15:44	6° $\overline{2}$ 12'02	0°17'59	opposition	-4731 Jul 25 j 19:03	25° $\overline{2}$ 10'45	-1°-4'-49
max. Earth dist.	-4739 Jan 01 j 16:34	6° $\overline{2}$ 14'22	30.97263 AU	min. Earth dist.	-4731 Jul 24 j 18:44	25° $\overline{2}$ 12'27	28.89786 AU
retrograde	-4739 Apr 17 j 20:31	8° $\overline{2}$ 46'11		direct	-4731 Oct 11 j 04:04	23° $\overline{2}$ 47'45	
opposition	-4739 Jul 07 j 17:43	7° $\overline{2}$ 21'04	0°-21'-50				
min. Earth dist.	-4739 Jul 06 j 18:04	7° $\overline{2}$ 22'42	28.96791 AU	conjunction	-4730 Jan 21 j 03:22	26° $\overline{2}$ 15'35	-1°-2'-56
direct	-4739 Sep 23 j 13:09	5° $\overline{2}$ 58'20		minimum elong	-4730 Jan 21 j 03:22	26° $\overline{2}$ 15'35	1°03'11
				max. Earth dist.	-4730 Jan 22 j 06:15	26° $\overline{2}$ 18'06	30.89493 AU
conjunction	-4738 Jan 03 j 03:22	8° $\overline{2}$ 25'38	0°-22'-58	retrograde	-4730 May 08 j 17:14	28° $\overline{2}$ 50'23	
minimum elong	-4738 Jan 03 j 03:22	8° $\overline{2}$ 25'38	0°23'12	min. Earth dist.	-4730 Jul 27 j 06:04	27° $\overline{2}$ 26'44	28.89342 AU
max. Earth dist.	-4738 Jan 04 j 03:06	8° $\overline{2}$ 27'52	30.96234 AU	opposition	-4730 Jul 28 j 06:58	27° $\overline{2}$ 25'00	-1°-9'-51
retrograde	-4738 Apr 20 j 10:17	10° $\overline{2}$ 59'52		direct	-4730 Oct 13 j 16:05	26° $\overline{2}$ 01'59	
min. Earth dist.	-4738 Jul 09 j 07:03	9° $\overline{2}$ 36'18	28.95725 AU				
opposition	-4738 Jul 10 j 06:13	9° $\overline{2}$ 34'42	0°-27'-24	conjunction	-4729 Jan 23 j 15:45	28° $\overline{2}$ 29'56	-1°-7'-35
direct	-4738 Sep 25 j 23:38	8° $\overline{2}$ 11'55		minimum elong	-4729 Jan 23 j 15:45	28° $\overline{2}$ 29'56	1°07'52
				max. Earth dist.	-4729 Jan 24 j 17:31	28° $\overline{2}$ 32'22	30.89058 AU
conjunction	-4737 Jan 05 j 15:05	10° $\overline{2}$ 39'15	0°-28'-10		-4729 Mar 07 j 03:13	0° $\overline{2}$	
minimum elong	-4737 Jan 05 j 15:05	10° $\overline{2}$ 39'15	0°28'25	retrograde	-4729 May 11 j 07:33	1° $\overline{2}$ 04'50	
max. Earth dist.	-4737 Jan 06 j 15:58	10° $\overline{2}$ 41'36	30.95130 AU		-4729 Jul 18 j 09:35	30° $\overline{2}$	
retrograde	-4737 Apr 22 j 22:30	13° $\overline{2}$ 13'33		opposition	-4729 Jul 30 j 19:03	29° $\overline{2}$ 39'27	-1°-14'-47
opposition	-4737 Jul 12 j 18:29	11° $\overline{2}$ 48'18	0°-32'-56	min. Earth dist.	-4729 Jul 29 j 18:50	29° $\overline{2}$ 41'09	28.88917 AU
min. Earth dist.	-4737 Jul 11 j 19:05	11° $\overline{2}$ 49'56	28.94607 AU	direct	-4729 Oct 16 j 01:57	28° $\overline{2}$ 16'26	
direct	-4737 Sep 28 j 12:32	10° $\overline{2}$ 25'29			-4728 Jan 06 j 05:46	0° $\overline{2}$	
conjunction	-4736 Jan 08 j 02:46	12° $\overline{2}$ 52'51	0°-33'-18	conjunction	-4728 Jan 26 j 04:38	0° $\overline{2}$ 44'30	-1°-12'-9
minimum elong	-4736 Jan 08 j 02:46	12° $\overline{2}$ 52'51	0°33'33	minimum elong	-4728 Jan 26 j 04:38	0° $\overline{2}$ 44'30	1°12'25
max. Earth dist.	-4736 Jan 09 j 03:00	12° $\overline{2}$ 55'08	30.94026 AU	max. Earth dist.	-4728 Jan 27 j 07:11	0° $\overline{2}$ 47'00	30.88606 AU
retrograde	-4736 Apr 24 j 13:00	15° $\overline{2}$ 27'13		retrograde	-4728 May 12 j 21:25	3° $\overline{2}$ 19'27	
min. Earth dist.	-4736 Jul 13 j 06:51	14° $\overline{2}$ 03'33	28.93532 AU	min. Earth dist.	-4728 Jul 31 j 07:02	1° $\overline{2}$ 55'45	28.88440 AU
opposition	-4736 Jul 14 j 06:43	14° $\overline{2}$ 01'54	0°-38'-25	opposition	-4728 Aug 01 j 07:00	1° $\overline{2}$ 54'05	-1°-19'-37
direct	-4736 Sep 29 j 23:42	12° $\overline{2}$ 39'00		direct	-4728 Oct 17 j 15:02	0° $\overline{2}$ 31'03	
conjunction	-4735 Jan 09 j 14:38	15° $\overline{2}$ 06'26	0°-38'-24	conjunction	-4727 Jan 27 j 17:34	2° $\overline{2}$ 59'12	-1°-16'-37
minimum elong	-4735 Jan 09 j 14:38	15° $\overline{2}$ 06'25	0°38'40	minimum elong	-4727 Jan 27 j 17:34	2° $\overline{2}$ 59'12	1°16'53
max. Earth dist.	-4735 Jan 10 j 15:53	15° $\overline{2}$ 08'48	30.92970 AU	max. Earth dist.	-4727 Jan 28 j 18:41	3° $\overline{2}$ 01'34	30.88091 AU
retrograde	-4735 Apr 27 j 00:20	17° $\overline{2}$ 40'51		retrograde	-4727 May 15 j 12:56	5° $\overline{2}$ 34'11	
opposition	-4735 Jul 16 j 18:56	16° $\overline{2}$ 15'29	0°-43'-50	opposition	-4727 Aug 03 j 19:02	4° $\overline{2}$ 08'49	-1°-24'-19
min. Earth dist.	-4735 Jul 15 j 19:25	16° $\overline{2}$ 17'07	28.92526 AU	min. Earth dist.	-4727 Aug 02 j 19:17	4° $\overline{2}$ 10'28	28.87883 AU
direct	-4735 Oct 02 j 11:06	14° $\overline{2}$ 52'33		direct	-4727 Oct 20 j 02:59	2° $\overline{2}$ 45'43	
conjunction	-4734 Jan 12 j 02:36	17° $\overline{2}$ 20'01	0°-43'-27	conjunction	-4726 Jan 30 j 06:44	5° $\overline{2}$ 13'59	-1°-20'-57
minimum elong	-4734 Jan 12 j 02:36	17° $\overline{2}$ 20'01	0°43'42	minimum elong	-4726 Jan 30 j 06:43	5° $\overline{2}$ 13'59	1°21'13
max. Earth dist.	-4734 Jan 13 j 03:52	17° $\overline{2}$ 22'24	30.92023 AU	max. Earth dist.	-4726 Jan 31 j 08:02	5° $\overline{2}$ 16'22	30.87466 AU
retrograde	-4734 Apr 29 j 12:59	19° $\overline{2}$ 54'31		retrograde	-4726 May 18 j 00:43	7° $\overline{2}$ 48'58	

Attention, astronomical year style is used: The year -4726 in astronomical counting style is the year 4727 BCE in historical counting style.

min. Earth dist.	-4726 Aug 05 j 08:14	6° $\overline{25}$ '10	28.87214 AU	conjunction	-4717 Feb 20 j 07:07	25° $\overline{26}$ '10	-1°-53'-48
opposition	-4726 Aug 06 j 06:55	6° $\overline{23}$ '34	-1°-28'-54	minimum elong	-4717 Feb 20 j 07:06	25° $\overline{26}$ '10	1°54'03
direct	-4726 Oct 22 j 14:55	5° $\overline{00}$ '26		max. Earth dist.	-4717 Feb 21 j 05:58	25° $\overline{28}$ '18	30.83089 AU
				retrograde	-4717 Jun 07 j 23:21	28° $\overline{01}$ '05	
conjunction	-4725 Feb 01 j 19:51	7° $\overline{28}$ '44	-1°-25'-11	opposition	-4717 Aug 26 j 15:02	26° $\overline{35}$ '43	-2°-3'-17
minimum elong	-4725 Feb 01 j 19:50	7° $\overline{28}$ '44	1°25'26	min. Earth dist.	-4717 Aug 25 j 19:14	26° $\overline{37}$ '06	28.83196 AU
max. Earth dist.	-4725 Feb 02 j 20:22	7° $\overline{31}$ '03	30.86767 AU	direct	-4717 Nov 11 j 21:03	25° $\overline{12}$ '06	
retrograde	-4725 May 20 j 14:44	10° $\overline{03}$ '43					
opposition	-4725 Aug 08 j 18:45	8° $\overline{38}$ '17	-1°-33'-21	conjunction	-4716 Feb 22 j 20:59	27° $\overline{41}$ '23	-1°-56'-39
min. Earth dist.	-4725 Aug 07 j 19:43	8° $\overline{39}$ '54	28.86491 AU	minimum elong	-4716 Feb 22 j 20:59	27° $\overline{41}$ '23	1°56'53
direct	-4725 Oct 25 j 02:45	7° $\overline{15}$ '03		max. Earth dist.	-4716 Feb 23 j 18:44	27° $\overline{43}$ '26	30.83021 AU
					-4716 May 08 j 21:40	0° \approx	
conjunction	-4724 Feb 04 j 08:53	9° $\overline{43}$ '26	-1°-29'-16	retrograde	-4716 Jun 09 j 14:45	0° \approx 16'18	
minimum elong	-4724 Feb 04 j 08:53	9° $\overline{43}$ '26	1°29'31		-4716 Jul 11 j 12:25	30° \overline{R} $\overline{3}$	
max. Earth dist.	-4724 Feb 05 j 09:06	9° $\overline{45}$ '43	30.86017 AU	min. Earth dist.	-4716 Aug 27 j 06:37	28° $\overline{52}$ '24	28.83117 AU
retrograde	-4724 May 22 j 03:04	12° $\overline{18}$ '24		opposition	-4716 Aug 28 j 02:26	28° $\overline{51}$ '00	-2°-6'-14
min. Earth dist.	-4724 Aug 09 j 08:54	10° $\overline{54}$ '27	28.85749 AU	direct	-4716 Nov 13 j 09:10	27° $\overline{27}$ '22	
opposition	-4724 Aug 10 j 06:37	10° $\overline{52}$ '55	-1°-37'-39				
direct	-4724 Oct 26 j 13:15	9° $\overline{29}$ '36		conjunction	-4715 Feb 24 j 11:10	29° $\overline{56}$ '48	-1°-59'-20
				minimum elong	-4715 Feb 24 j 11:10	29° $\overline{56}$ '48	1°59'34
conjunction	-4723 Feb 05 j 22:12	11° $\overline{58}$ '03	-1°-33'-13	max. Earth dist.	-4715 Feb 25 j 08:10	29° $\overline{58}$ '46	30.82897 AU
minimum elong	-4723 Feb 05 j 22:12	11° $\overline{58}$ '03	1°33'29		-4715 Feb 25 j 21:14	0° \approx	
max. Earth dist.	-4723 Feb 06 j 22:29	12° $\overline{00}$ '20	30.85290 AU	retrograde	-4715 Jun 12 j 03:59	2° \approx 31'42	
retrograde	-4723 May 24 j 15:45	14° $\overline{32}$ '59		opposition	-4715 Aug 30 j 13:50	1° \approx 06'26	-2°-9'00
opposition	-4723 Aug 12 j 18:05	13° $\overline{07}$ '28	-1°-41'-48	min. Earth dist.	-4715 Aug 29 j 19:52	1° \approx 07'42	28.82963 AU
min. Earth dist.	-4723 Aug 11 j 19:39	13° $\overline{09}$ '03	28.85051 AU		-4715 Oct 14 j 17:43	30° \overline{R} $\overline{3}$	
direct	-4723 Oct 29 j 01:03	11° $\overline{44}$ '04		direct	-4715 Nov 15 j 19:55	29° $\overline{42}$ '46	
					-4715 Dec 17 j 10:34	0° \approx	
conjunction	-4722 Feb 08 j 11:26	14° $\overline{12}$ '35	-1°-37'-2				
minimum elong	-4722 Feb 08 j 11:26	14° $\overline{12}$ '35	1°37'17	conjunction	-4714 Feb 27 j 01:28	2° \approx 12'20	-2°-1'-49
max. Earth dist.	-4722 Feb 09 j 10:49	14° $\overline{14}$ '47	30.84621 AU	minimum elong	-4714 Feb 27 j 01:28	2° \approx 12'20	2°02'02
retrograde	-4722 May 27 j 03:42	16° $\overline{47}$ '30		max. Earth dist.	-4714 Feb 27 j 21:41	2° \approx 14'14	30.82699 AU
min. Earth dist.	-4722 Aug 14 j 08:26	15° $\overline{23}$ '28	28.84446 AU	retrograde	-4714 Jun 14 j 17:00	4° \approx 47'11	
opposition	-4722 Aug 15 j 05:46	15° $\overline{21}$ '58	-1°-45'-48	min. Earth dist.	-4714 Sep 01 j 07:03	3° \approx 23'14	28.82714 AU
direct	-4722 Oct 31 j 11:15	13° $\overline{58}$ '30		opposition	-4714 Sep 02 j 01:12	3° \approx 21'57	-2°-11'-34
				direct	-4714 Nov 18 j 08:15	1° \approx 58'13	
conjunction	-4721 Feb 11 j 00:42	16° $\overline{27}$ '06	-1°-40'-42				
minimum elong	-4721 Feb 11 j 00:42	16° $\overline{27}$ '06	1°40'58	conjunction	-4713 Mar 01 j 15:31	4° \approx 27'52	-2°-4'-8
max. Earth dist.	-4721 Feb 12 j 00:58	16° $\overline{29}$ '23	30.84067 AU	minimum elong	-4713 Mar 01 j 15:31	4° \approx 27'52	2°04'22
retrograde	-4721 May 29 j 16:22	19° $\overline{02}$ '01		max. Earth dist.	-4713 Mar 02 j 10:13	4° \approx 29'38	30.82397 AU
opposition	-4721 Aug 17 j 17:16	17° $\overline{36}$ '28	-1°-49'-38	retrograde	-4713 Jun 17 j 04:50	7° \approx 02'40	
min. Earth dist.	-4721 Aug 16 j 19:21	17° $\overline{38}$ '01	28.83958 AU	opposition	-4713 Sep 04 j 12:40	5° \approx 37'26	-2°-13'-56
direct	-4721 Nov 02 j 23:09	16° $\overline{12}$ '57		min. Earth dist.	-4713 Sep 03 j 20:14	5° \approx 38'36	28.82382 AU
				direct	-4713 Nov 20 j 18:44	4° \approx 13'38	
conjunction	-4720 Feb 13 j 14:03	18° $\overline{41}$ '40	-1°-44'-13				
minimum elong	-4720 Feb 13 j 14:03	18° $\overline{41}$ '40	1°44'28	conjunction	-4712 Mar 03 j 05:55	6° \approx 43'22	-2°-6'-15
max. Earth dist.	-4720 Feb 14 j 13:05	18° $\overline{43}$ '50	30.83644 AU	minimum elong	-4712 Mar 03 j 05:54	6° \approx 43'22	2°06'28
retrograde	-4720 May 31 j 06:12	21° $\overline{16}$ '34		max. Earth dist.	-4712 Mar 04 j 00:38	6° \approx 45'08	30.82037 AU
min. Earth dist.	-4720 Aug 18 j 07:34	19° $\overline{52}$ '33	28.83618 AU	retrograde	-4712 Jun 18 j 17:25	9° \approx 18'04	
opposition	-4720 Aug 19 j 04:46	19° $\overline{51}$ '03	-1°-53'-19	opposition	-4712 Sep 05 j 23:45	7° \approx 52'50	-2°-16'-5
direct	-4720 Nov 04 j 08:57	18° $\overline{27}$ '28		min. Earth dist.	-4712 Sep 05 j 07:24	7° \approx 53'59	28.82001 AU
				direct	-4712 Nov 22 j 06:31	6° \approx 28'55	
conjunction	-4719 Feb 15 j 03:42	20° $\overline{56}$ '20	-1°-47'-35				
minimum elong	-4719 Feb 15 j 03:41	20° $\overline{56}$ '20	1°47'50	conjunction	-4711 Mar 05 j 20:11	8° \approx 58'45	-2°-8'-10
max. Earth dist.	-4719 Feb 16 j 03:34	20° $\overline{58}$ '34	30.83359 AU	minimum elong	-4711 Mar 05 j 20:11	8° \approx 58'45	2°08'24
retrograde	-4719 Jun 02 j 19:37	23° $\overline{31}$ '14		max. Earth dist.	-4711 Mar 06 j 13:04	9° \approx 00'20	30.81653 AU
opposition	-4719 Aug 21 j 16:13	22° $\overline{05}$ '45	-1°-56'-49	retrograde	-4711 Jun 21 j 05:49	11° \approx 33'21	
min. Earth dist.	-4719 Aug 20 j 19:08	22° $\overline{07}$ '14	28.83392 AU	opposition	-4711 Sep 08 j 10:57	10° \approx 08'06	-2°-18'-3
direct	-4719 Nov 06 j 21:51	20° $\overline{42}$ '09		min. Earth dist.	-4711 Sep 07 j 19:50	10° \approx 09'10	28.81637 AU
				direct	-4711 Nov 24 j 16:59	8° \approx 44'05	
conjunction	-4718 Feb 17 j 17:17	23° $\overline{11}$ '09	-1°-50'-47				
minimum elong	-4718 Feb 17 j 17:17	23° $\overline{11}$ '09	1°51'01	conjunction	-4710 Mar 08 j 10:31	11° \approx 13'59	-2°-9'-54
max. Earth dist.	-4718 Feb 18 j 15:46	23° $\overline{13}$ '15	30.83188 AU	minimum elong	-4710 Mar 08 j 10:31	11° \approx 13'59	2°10'06
retrograde	-4718 Jun 05 j 10:44	25° $\overline{46}$ '03		max. Earth dist.	-4710 Mar 09 j 03:52	11° \approx 15'37	30.81303 AU
min. Earth dist.	-4718 Aug 23 j 06:40	24° $\overline{22}$ '06	28.83272 AU	retrograde	-4710 Jun 23 j 17:25	13° \approx 48'28	
opposition	-4718 Aug 24 j 03:35	24° $\overline{20}$ '37	-2°00'-9	opposition	-4710 Sep 10 j 21:55	12° \approx 23'13	-2°-19'-47
direct	-4718 Nov 09 j 09:28	22° $\overline{57}$ '01		min. Earth dist.	-4710 Sep 10 j 07:13	12° \approx 24'15	28.81326 AU

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Attention, astronomical year style is used: The year -4710 in astronomical counting style is the year 4711 BCE in historical counting style.

direct	-4710 Nov 27 j 06:13	10° \approx 59'06		min. Earth dist.	-4702 Sep 28 j 04:06	0° \times 24'11	28.82891 AU
					-4702 Oct 12 j 11:55	30° \approx	
conjunction	-4709 Mar 11 j 00:42	13° \approx 29'06	-2°-11'-26	direct	-4702 Dec 15 j 03:24	28° \approx 59'06	
minimum elong	-4709 Mar 11 j 00:42	13° \approx 29'06	2°11'39		-4701 Feb 14 j 22:36	0° \times	
max. Earth dist.	-4709 Mar 11 j 16:21	13° \approx 30'34	30.81049 AU				
	-4709 Apr 23 j 05:42	15° \approx		conjunction	-4701 Mar 29 j 20:59	1° \times 30'02	-2°-16'-17
retrograde	-4709 Jun 26 j 07:14	16° \approx 03'28		minimum elong	-4701 Mar 29 j 20:59	1° \times 30'02	2°16'26
	-4709 Aug 31 j 10:50	15° \approx		max. Earth dist.	-4701 Mar 30 j 07:01	1° \times 30'58	30.82841 AU
opposition	-4709 Sep 13 j 08:52	14° \approx 38'13	-2°-21'-19	retrograde	-4701 Jul 14 j 13:02	4° \times 03'37	
min. Earth dist.	-4709 Sep 12 j 18:26	14° \approx 39'14	28.81143 AU	opposition	-4701 Sep 30 j 23:43	2° \times 38'51	-2°-25'-35
direct	-4709 Nov 29 j 17:55	13° \approx 14'00		min. Earth dist.	-4701 Sep 30 j 15:48	2° \times 39'25	28.83122 AU
	-4708 Feb 21 j 17:03	15° \approx		direct	-4701 Dec 17 j 16:11	1° \times 14'20	
conjunction	-4708 Mar 12 j 15:01	15° \approx 44'06	-2°-12'-46	conjunction	-4700 Mar 31 j 11:41	3° \times 45'21	-2°-15'-57
minimum elong	-4708 Mar 12 j 15:01	15° \approx 44'06	2°12'57	minimum elong	-4700 Mar 31 j 11:42	3° \times 45'21	2°16'05
max. Earth dist.	-4708 Mar 13 j 07:02	15° \approx 45'36	30.80923 AU	max. Earth dist.	-4700 Mar 31 j 19:20	3° \times 46'04	30.83046 AU
retrograde	-4708 Jun 27 j 19:17	18° \approx 18'22		retrograde	-4700 Jul 16 j 02:23	6° \times 18'48	
opposition	-4708 Sep 14 j 19:52	16° \approx 53'08	-2°-22'-37	opposition	-4700 Oct 02 j 10:29	4° \times 54'04	-2°-25'-8
min. Earth dist.	-4708 Sep 14 j 06:25	16° \approx 54'05	28.81089 AU	min. Earth dist.	-4700 Oct 02 j 03:22	4° \times 54'34	28.83299 AU
direct	-4708 Dec 01 j 05:49	15° \approx 28'51		direct	-4700 Dec 19 j 03:46	3° \times 29'28	
conjunction	-4707 Mar 15 j 05:22	17° \approx 59'03	-2°-13'-53	conjunction	-4699 Apr 03 j 02:34	6° \times 00'35	-2°-15'-25
minimum elong	-4707 Mar 15 j 05:22	17° \approx 59'03	2°14'05	minimum elong	-4699 Apr 03 j 02:35	6° \times 00'35	2°15'33
max. Earth dist.	-4707 Mar 15 j 20:11	18° \approx 00'26	30.80952 AU	max. Earth dist.	-4699 Apr 03 j 10:02	6° \times 01'16	30.83198 AU
retrograde	-4707 Jun 30 j 10:11	20° \approx 33'12		retrograde	-4699 Jul 18 j 13:40	8° \times 33'52	
opposition	-4707 Sep 17 j 06:37	19° \approx 08'00	-2°-23'-43	opposition	-4699 Oct 04 j 21:08	7° \times 09'10	-2°-24'-27
min. Earth dist.	-4707 Sep 16 j 16:57	19° \approx 08'58	28.81195 AU	min. Earth dist.	-4699 Oct 04 j 15:31	7° \times 09'34	28.83440 AU
direct	-4707 Dec 03 j 18:47	17° \approx 43'41		direct	-4699 Dec 21 j 15:56	5° \times 44'30	
conjunction	-4706 Mar 17 j 19:47	20° \approx 14'00	-2°-14'-49	conjunction	-4698 Apr 05 j 17:13	8° \times 15'41	-2°-14'-41
minimum elong	-4706 Mar 17 j 19:47	20° \approx 14'00	2°14'59	minimum elong	-4698 Apr 05 j 17:14	8° \times 15'41	2°14'48
max. Earth dist.	-4706 Mar 18 j 10:19	20° \approx 15'21	30.81122 AU	max. Earth dist.	-4698 Apr 05 j 22:56	8° \times 16'13	30.83362 AU
retrograde	-4706 Jul 02 j 22:29	22° \approx 48'04		retrograde	-4698 Jul 21 j 03:48	10° \times 48'49	
opposition	-4706 Sep 19 j 17:36	21° \approx 22'55	-2°-24'-35	opposition	-4698 Oct 07 j 07:42	9° \times 24'09	-2°-23'-33
min. Earth dist.	-4706 Sep 19 j 05:26	21° \approx 23'47	28.81438 AU	min. Earth dist.	-4698 Oct 07 j 02:08	9° \times 24'32	28.83622 AU
direct	-4706 Dec 06 j 06:16	19° \approx 58'34		direct	-4698 Dec 24 j 05:38	7° \times 59'24	
conjunction	-4705 Mar 20 j 10:05	22° \approx 29'00	-2°-15'-31	conjunction	-4697 Apr 08 j 07:45	10° \times 30'39	-2°-13'-44
minimum elong	-4705 Mar 20 j 10:05	22° \approx 29'00	2°15'42	minimum elong	-4697 Apr 08 j 07:45	10° \times 30'40	2°13'51
max. Earth dist.	-4705 Mar 21 j 00:04	22° \approx 30'18	30.81434 AU	max. Earth dist.	-4697 Apr 08 j 13:07	10° \times 31'09	30.83571 AU
retrograde	-4705 Jul 05 j 12:09	25° \approx 02'59		retrograde	-4697 Jul 23 j 15:07	13° \times 03'39	
opposition	-4705 Sep 22 j 04:23	23° \approx 37'55	-2°-25'-14	opposition	-4697 Oct 09 j 18:20	11° \times 38'59	-2°-22'-26
min. Earth dist.	-4705 Sep 21 j 15:54	23° \approx 38'49	28.81791 AU	min. Earth dist.	-4697 Oct 09 j 14:30	11° \times 39'16	28.83877 AU
direct	-4705 Dec 08 j 18:46	22° \approx 13'33		direct	-4697 Dec 26 j 17:57	10° \times 14'11	
conjunction	-4704 Mar 22 j 00:38	24° \approx 44'07	-2°-16'-2	conjunction	-4696 Apr 09 j 22:23	12° \times 45'31	-2°-12'-36
minimum elong	-4704 Mar 22 j 00:38	24° \approx 44'07	2°16'11	minimum elong	-4696 Apr 09 j 22:23	12° \times 45'31	2°12'41
max. Earth dist.	-4704 Mar 22 j 13:16	24° \approx 45'17	30.81814 AU	max. Earth dist.	-4696 Apr 10 j 02:50	12° \times 45'55	30.83889 AU
retrograde	-4704 Jul 07 j 00:47	27° \approx 18'01		retrograde	-4696 Jul 25 j 04:33	15° \times 18'20	
opposition	-4704 Sep 23 j 15:13	25° \approx 53'02	-2°-25'-39	opposition	-4696 Oct 11 j 04:41	13° \times 53'44	-2°-21'-6
min. Earth dist.	-4704 Sep 23 j 04:32	25° \approx 53'48	28.82194 AU	min. Earth dist.	-4696 Oct 11 j 00:32	13° \times 54'02	28.84249 AU
direct	-4704 Dec 10 j 05:01	24° \approx 28'39		direct	-4696 Dec 28 j 07:06	12° \times 28'51	
conjunction	-4703 Mar 24 j 15:28	26° \approx 59'21	-2°-16'-19	conjunction	-4695 Apr 12 j 12:59	15° \times 00'16	-2°-11'-15
minimum elong	-4703 Mar 24 j 15:29	26° \approx 59'21	2°16'29	minimum elong	-4695 Apr 12 j 13:00	15° \times 00'16	2°11'21
max. Earth dist.	-4703 Mar 25 j 03:48	27° \approx 00'30	30.82217 AU	max. Earth dist.	-4695 Apr 12 j 16:18	15° \times 00'35	30.84328 AU
retrograde	-4703 Jul 09 j 13:48	29° \approx 33'09		retrograde	-4695 Jul 27 j 17:12	17° \times 32'56	
opposition	-4703 Sep 26 j 02:02	28° \approx 08'16	-2°-25'-51	opposition	-4695 Oct 13 j 15:18	16° \times 08'24	-2°-19'-33
min. Earth dist.	-4703 Sep 25 j 15:39	28° \approx 09'00	28.82572 AU	min. Earth dist.	-4695 Oct 13 j 12:38	16° \times 08'35	28.84767 AU
direct	-4703 Dec 12 j 16:54	26° \approx 43'51		direct	-4695 Dec 30 j 18:09	14° \times 43'30	
conjunction	-4702 Mar 27 j 06:05	29° \approx 14'40	-2°-16'-24	conjunction	-4694 Apr 15 j 03:27	17° \times 14'59	-2°-9'-42
minimum elong	-4702 Mar 27 j 06:05	29° \approx 14'40	2°16'33	minimum elong	-4694 Apr 15 j 03:28	17° \times 14'59	2°09'47
max. Earth dist.	-4702 Mar 27 j 16:16	29° \approx 15'37	30.82564 AU	max. Earth dist.	-4694 Apr 15 j 06:43	17° \times 15'18	30.84927 AU
	-4702 Apr 16 j 18:24	0° \times		retrograde	-4694 Jul 30 j 05:35	19° \times 47'30	
retrograde	-4702 Jul 12 j 01:45	1° \times 48'23		opposition	-4694 Oct 16 j 01:44	18° \times 23'03	-2°-17'-47
opposition	-4702 Sep 28 j 12:57	0° \times 23'34	-2°-25'-50	min. Earth dist.	-4694 Oct 15 j 22:57	18° \times 23'15	28.85429 AU

Attention, astronomical year style is used: The year -4693 in astronomical counting style is the year 4694 BCE in historical counting style.

direct	-4693 Jan 02 j 06:29	16° ✕ 58'08		direct	-4685 Jan 20 j 07:32	4° ° 55'31	
conjunction	-4693 Apr 17 j 17:56	19° ✕ 29'43	-2°-7'-58	conjunction	-4685 May 06 j 14:33	7° ° 27'38	-1°-47'-16
minimum elong	-4693 Apr 17 j 17:56	19° ✕ 29'43	2°08'03	minimum elong	-4685 May 06 j 14:34	7° ° 27'38	1°47'17
max. Earth dist.	-4693 Apr 17 j 19:32	19° ✕ 29'52	30.85667 AU	max. Earth dist.	-4685 May 06 j 07:39	7° ° 26'59	30.91489 AU
retrograde	-4693 Aug 01 j 16:46	22° ° 02'06		retrograde	-4685 Aug 19 j 15:33	9° ° 58'40	
opposition	-4693 Oct 18 j 12:10	20° ✕ 37'45	-2°-15'-49	opposition	-4685 Nov 04 j 23:56	8° ° 34'52	-1°-52'-56
min. Earth dist.	-4693 Oct 18 j 10:36	20° ✕ 37'51	28.86234 AU	min. Earth dist.	-4685 Nov 05 j 06:07	8° ° 34'25	28.91869 AU
direct	-4692 Jan 04 j 17:01	19° ✕ 12'49		direct	-4684 Jan 22 j 21:14	7° ° 09'37	
conjunction	-4692 Apr 19 j 08:37	21° ✕ 44'30	-2°-6'-1	conjunction	-4684 May 08 j 04:49	9° ° 41'45	-1°-43'-56
minimum elong	-4692 Apr 19 j 08:38	21° ✕ 44'30	2°06'05	minimum elong	-4684 May 08 j 04:49	9° ° 41'45	1°43'55
max. Earth dist.	-4692 Apr 19 j 10:25	21° ✕ 44'40	30.86522 AU	max. Earth dist.	-4684 May 07 j 20:11	9° ° 40'57	30.92062 AU
retrograde	-4692 Aug 03 j 03:42	24° ✕ 16'45		retrograde	-4684 Aug 21 j 02:39	12° ° 12'36	
opposition	-4692 Oct 19 j 22:38	22° ✕ 52'31	-2°-13'-38	opposition	-4684 Nov 06 j 10:21	10° ° 48'50	-1°-49'-16
min. Earth dist.	-4692 Oct 19 j 21:52	22° ✕ 52'34	28.87104 AU	min. Earth dist.	-4684 Nov 06 j 17:44	10° ° 48'18	28.92478 AU
direct	-4691 Jan 06 j 05:00	21° ✕ 27'35		direct	-4683 Jan 24 j 08:31	9° ° 23'32	
conjunction	-4691 Apr 21 j 23:11	23° ✕ 59'22	-2°-3'-53	conjunction	-4683 May 10 j 19:01	11° ° 55'42	-1°-40'-25
minimum elong	-4691 Apr 21 j 23:12	23° ✕ 59'22	2°03'56	minimum elong	-4683 May 10 j 19:02	11° ° 55'42	1°40'24
max. Earth dist.	-4691 Apr 21 j 22:44	23° ✕ 59'20	30.87414 AU	max. Earth dist.	-4683 May 10 j 10:41	11° ° 54'55	30.92715 AU
retrograde	-4691 Aug 05 j 16:38	26° ✕ 31'29		retrograde	-4683 Aug 23 j 12:57	14° ° 26'21	
opposition	-4691 Oct 22 j 09:05	25° ✕ 07'21	-2°-11'-14	opposition	-4683 Nov 08 j 20:41	13° ° 02'39	-1°-45'-27
min. Earth dist.	-4691 Oct 22 j 09:04	25° ✕ 07'21	28.87995 AU	min. Earth dist.	-4683 Nov 09 j 04:37	13° ° 02'05	28.93174 AU
direct	-4690 Jan 08 j 15:29	23° ✕ 42'24		direct	-4682 Jan 26 j 21:01	11° ° 37'19	
conjunction	-4690 Apr 24 j 13:56	26° ✕ 14'18	-2°-1'-33	conjunction	-4682 May 13 j 08:59	14° ° 09'31	-1°-36'-46
minimum elong	-4690 Apr 24 j 13:56	26° ✕ 14'18	2°01'35	minimum elong	-4682 May 13 j 09:00	14° ° 09'31	1°36'45
max. Earth dist.	-4690 Apr 24 j 13:17	26° ✕ 14'14	30.88283 AU	max. Earth dist.	-4682 May 12 j 22:49	14° ° 08'34	30.93484 AU
retrograde	-4690 Aug 08 j 02:56	28° ✕ 46'16		retrograde	-4682 Aug 26 j 00:52	16° ° 40'01	
opposition	-4690 Oct 24 j 19:41	27° ° 22'14	-2°-8'-39	opposition	-4682 Nov 11 j 07:00	15° ° 16'23	-1°-41'-28
min. Earth dist.	-4690 Oct 24 j 21:18	27° ° 22'07	28.88827 AU	min. Earth dist.	-4682 Nov 11 j 15:08	15° ° 15'48	28.94011 AU
direct	-4689 Jan 11 j 03:29	25° ✕ 57'16		direct	-4681 Jan 29 j 07:24	13° ° 51'01	
conjunction	-4689 Apr 27 j 04:25	28° ✕ 29'13	-1°-59'-2	conjunction	-4681 May 15 j 23:00	16° ° 23'17	-1°-32'-59
minimum elong	-4689 Apr 27 j 04:26	28° ✕ 29'13	1°59'05	minimum elong	-4681 May 15 j 23:01	16° ° 23'17	1°32'57
max. Earth dist.	-4689 Apr 27 j 01:35	28° ✕ 28'57	30.89086 AU	max. Earth dist.	-4681 May 15 j 13:13	16° ° 22'22	30.94387 AU
	-4689 Jun 09 j 14:22	0° °		retrograde	-4681 Aug 28 j 10:10	18° ° 53'38	
retrograde	-4689 Aug 10 j 15:59	1° ° 01'02		opposition	-4681 Nov 13 j 17:24	17° ° 30'06	-1°-37'-20
	-4689 Oct 13 j 15:41	30° ° R ✕		min. Earth dist.	-4681 Nov 14 j 02:45	17° ° 29'26	28.94961 AU
opposition	-4689 Oct 27 j 06:13	29° ✕ 37'04	-2°-5'-52	direct	-4680 Jan 31 j 19:20	16° ° 04'45	
min. Earth dist.	-4689 Oct 27 j 08:12	29° ✕ 36'55	28.89574 AU				
direct	-4688 Jan 13 j 17:05	28° ✕ 12'03		conjunction	-4680 May 17 j 12:57	18° ° 37'04	-1°-29'-2
	-4688 Apr 08 j 18:45	0° °		minimum elong	-4680 May 17 j 12:57	18° ° 37'04	1°28'59
				max. Earth dist.	-4680 May 17 j 01:24	18° ° 36'00	30.95404 AU
conjunction	-4688 Apr 28 j 19:11	0° ° 44'04	-1°-56'-21	retrograde	-4680 Aug 29 j 22:19	21° ° 07'17	
minimum elong	-4688 Apr 28 j 19:12	0° ° 44'04	1°56'22	opposition	-4680 Nov 15 j 03:37	19° ° 43'52	-1°-33'-3
max. Earth dist.	-4688 Apr 28 j 15:36	0° ° 43'44	30.89780 AU	min. Earth dist.	-4680 Nov 15 j 12:55	19° ° 43'12	28.96009 AU
retrograde	-4688 Aug 12 j 02:47	3° ° 15'42		direct	-4679 Feb 02 j 07:53	18° ° 18'32	
opposition	-4688 Oct 28 j 16:45	1° ° 51'47	-2°-2'-54				
min. Earth dist.	-4688 Oct 28 j 20:52	1° ° 51'30	28.90217 AU	conjunction	-4679 May 20 j 03:00	20° ° 50'56	-1°-24'-58
direct	-4687 Jan 15 j 05:22	0° ° 26'44		minimum elong	-4679 May 20 j 03:01	20° ° 50'56	1°24'55
				max. Earth dist.	-4679 May 19 j 15:22	20° ° 49'51	30.96477 AU
conjunction	-4687 May 01 j 09:48	2° ° 58'47	-1°-53'-29	retrograde	-4679 Sep 01 j 08:45	23° ° 21'01	
minimum elong	-4687 May 01 j 09:49	2° ° 58'47	1°53'31	opposition	-4679 Nov 17 j 14:09	21° ° 57'43	-1°-28'-37
max. Earth dist.	-4687 May 01 j 04:42	2° ° 58'19	30.90396 AU	min. Earth dist.	-4679 Nov 18 j 01:17	21° ° 56'56	28.97090 AU
retrograde	-4687 Aug 14 j 15:56	5° ° 30'13		direct	-4678 Feb 04 j 19:04	20° ° 32'24	
opposition	-4687 Oct 31 j 03:12	4° ° 06'21	-1°-59'-45				
min. Earth dist.	-4687 Oct 31 j 07:23	4° ° 06'03	28.90787 AU	conjunction	-4678 May 22 j 16:44	23° ° 04'52	-1°-20'-46
direct	-4686 Jan 17 j 19:16	2° ° 41'14		minimum elong	-4678 May 22 j 16:45	23° ° 04'52	1°20'42
				max. Earth dist.	-4678 May 22 j 03:50	23° ° 03'40	30.97561 AU
conjunction	-4686 May 04 j 00:09	5° ° 13'19	-1°-50'-28	retrograde	-4678 Sep 03 j 21:30	25° ° 34'49	
minimum elong	-4686 May 04 j 00:10	5° ° 13'19	1°50'28	opposition	-4678 Nov 20 j 00:32	24° ° 11'38	-1°-24'-4
max. Earth dist.	-4686 May 03 j 17:46	5° ° 12'43	30.90942 AU	min. Earth dist.	-4678 Nov 20 j 11:35	24° ° 10'51	28.98141 AU
retrograde	-4686 Aug 17 j 03:53	7° ° 44'33		direct	-4677 Feb 07 j 08:44	22° ° 46'20	
opposition	-4686 Nov 02 j 13:43	6° ° 20'42	-1°-56'-26				
min. Earth dist.	-4686 Nov 02 j 19:42	6° ° 20'17	28.91324 AU	conjunction	-4677 May 25 j 06:40	25° ° 18'51	-1°-16'-26

Attention, astronomical year style is used: The year -4677 in astronomical counting style is the year 4678 BCE in historical counting style.

minimum elong	-4677 May 25 j 06:40	25° Υ 18'51	1°16'22	conjunction	-4669 Jun 12 j 17:31	13° 8 05'12	0°-38'-33
max. Earth dist.	-4677 May 24 j 16:37	25° Υ 17'32	30.98574 AU	minimum elong	-4669 Jun 12 j 17:31	13° 8 05'12	0°38'25
retrograde	-4677 Sep 06 j 09:30	27° Υ 48'40		max. Earth dist.	-4669 Jun 11 j 21:24	13° 8 03'20	31.04800 AU
opposition	-4677 Nov 22 j 10:59	26° Υ 25'33	-1°-19'-23		-4669 Aug 10 j 03:20	15° 8	
min. Earth dist.	-4677 Nov 22 j 23:56	26° Υ 24'38	28.99114 AU	retrograde	-4669 Sep 23 j 21:06	15° 8 33'36	
direct	-4676 Feb 09 j 21:16	25° Υ 00'15			-4669 Nov 08 j 16:54	15° R 8	
				opposition	-4669 Dec 09 j 22:26	14° 8 10'50	0°-38'-32
conjunction	-4676 May 26 j 20:36	27° Υ 32'48	-1°-12'00	min. Earth dist.	-4669 Dec 10 j 15:44	14° 8 09'37	29.05337 AU
minimum elong	-4676 May 26 j 20:36	27° Υ 32'48	1°11'56	direct	-4668 Feb 28 j 01:04	12° 8 45'15	
max. Earth dist.	-4676 May 26 j 05:42	27° Υ 31'25	30.99501 AU		-4668 Jun 06 j 07:55	15° 8	
	-4676 Aug 26 j 23:05	0° 8		max. Earth dist.	-4668 Jun 13 j 09:58	15° 8 15'46	31.05844 AU
retrograde	-4676 Sep 07 j 21:01	0° 8 02'27					
	-4676 Sep 19 j 18:26	30° R Υ		conjunction	-4668 Jun 14 j 06:25	15° 8 17'40	0°-33'-30
opposition	-4676 Nov 23 j 21:29	28° Υ 39'24	-1°-14'-35	minimum elong	-4668 Jun 14 j 06:25	15° 8 17'40	0°33'22
min. Earth dist.	-4676 Nov 24 j 10:46	28° Υ 38'28	28.99971 AU	retrograde	-4668 Sep 25 j 07:59	17° 8 45'56	
direct	-4675 Feb 11 j 11:38	27° Υ 14'05		opposition	-4668 Dec 11 j 09:00	16° 8 23'14	0°-33'-7
				min. Earth dist.	-4668 Dec 12 j 03:29	16° 8 21'56	29.06440 AU
conjunction	-4675 May 29 j 10:14	29° Υ 46'39	-1°-7'-28		-4667 Feb 17 j 15:06	15° R 8	
minimum elong	-4675 May 29 j 10:15	29° Υ 46'39	1°07'23	direct	-4667 Mar 01 j 12:53	14° 8 57'41	
max. Earth dist.	-4675 May 28 j 17:33	29° Υ 45'06	31.00308 AU		-4667 Mar 13 j 11:33	15° 8	
	-4675 Jun 04 j 10:04	0° 8					
retrograde	-4675 Sep 10 j 08:20	2° 8 16'07		conjunction	-4667 Jun 16 j 19:04	17° 8 30'06	0°-28'-24
opposition	-4675 Nov 26 j 08:01	0° 8 53'08	-1°-9'-41	minimum elong	-4667 Jun 16 j 19:04	17° 8 30'06	0°28'15
min. Earth dist.	-4675 Nov 26 j 22:36	0° 8 52'06	29.00737 AU	max. Earth dist.	-4667 Jun 15 j 22:34	17° 8 28'12	31.06995 AU
	-4675 Dec 30 j 06:13	30° R Υ		retrograde	-4667 Sep 27 j 18:58	19° 8 58'16	
direct	-4674 Feb 13 j 23:15	29° Υ 27'46		opposition	-4667 Dec 13 j 19:29	18° 8 35'40	0°-27'-38
	-4674 Mar 30 j 22:07	0° 8		min. Earth dist.	-4667 Dec 14 j 13:48	18° 8 34'23	29.07606 AU
				direct	-4666 Mar 04 j 02:36	17° 8 10'09	
conjunction	-4674 May 31 j 23:54	2° 8 00'20	-1°-2'-51	max. Earth dist.	-4666 Jun 18 j 10:03	19° 8 40'35	31.08177 AU
minimum elong	-4674 May 31 j 23:55	2° 8 00'20	1°02'45				
max. Earth dist.	-4674 May 31 j 07:15	1° 8 58'47	31.01038 AU	conjunction	-4666 Jun 19 j 07:42	19° 8 42'35	0°-23'-15
retrograde	-4674 Sep 12 j 18:59	4° 8 29'36		minimum elong	-4666 Jun 19 j 07:42	19° 8 42'35	0°23'06
opposition	-4674 Nov 28 j 18:27	3° 8 06'40	-1°-4'-42	retrograde	-4666 Sep 30 j 06:36	22° 8 10'38	
min. Earth dist.	-4674 Nov 29 j 09:52	3° 8 05'34	29.01423 AU	opposition	-4666 Dec 16 j 06:00	20° 8 48'08	0°-22'-7
direct	-4673 Feb 16 j 12:45	1° 8 41'16		min. Earth dist.	-4666 Dec 17 j 01:15	20° 8 46'47	29.08796 AU
				direct	-4665 Mar 06 j 13:51	19° 8 22'39	
conjunction	-4673 Jun 03 j 13:14	4° 8 13'47	0°-58'-8				
minimum elong	-4673 Jun 03 j 13:15	4° 8 13'47	0°58'01	conjunction	-4665 Jun 21 j 20:24	21° 8 55'07	0°-18'-5
max. Earth dist.	-4673 Jun 02 j 18:38	4° 8 12'04	31.01712 AU	minimum elong	-4665 Jun 21 j 20:25	21° 8 55'07	0°17'55
retrograde	-4673 Sep 15 j 05:59	6° 8 42'53		max. Earth dist.	-4665 Jun 20 j 23:04	21° 8 53'08	31.09343 AU
opposition	-4673 Dec 01 j 04:49	5° 8 19'57	0°-59'-37	retrograde	-4665 Oct 02 j 17:19	24° 8 23'03	
min. Earth dist.	-4673 Dec 01 j 20:38	5° 8 18'50	29.02086 AU	opposition	-4665 Dec 18 j 16:41	23° 8 00'38	0°-16'-34
direct	-4672 Feb 19 j 00:14	3° 8 54'29		min. Earth dist.	-4665 Dec 19 j 12:40	22° 8 59'14	29.09916 AU
max. Earth dist.	-4672 Jun 04 j 08:24	6° 8 25'18	31.02373 AU	direct	-4664 Mar 08 j 03:38	21° 8 35'12	
				max. Earth dist.	-4664 Jun 22 j 09:49	24° 8 05'31	31.10419 AU
conjunction	-4672 Jun 05 j 02:39	6° 8 27'00	0°-53'-20				
minimum elong	-4672 Jun 05 j 02:39	6° 8 27'00	0°53'13	conjunction	-4664 Jun 23 j 08:57	24° 8 07'39	0°-12'-54
retrograde	-4672 Sep 16 j 14:03	8° 8 55'53		minimum elong	-4664 Jun 23 j 08:56	24° 8 07'39	0°12'44
opposition	-4672 Dec 02 j 15:15	7° 8 33'00	0°-54'-27	behind sun begin	-4664 Jun 23 j 04:53	24° 8 07'18	
min. Earth dist.	-4672 Dec 03 j 08:19	7° 8 31'47	29.02754 AU	behind sun end	-4664 Jun 23 j 13:00	24° 8 08'01	
direct	-4671 Feb 20 j 12:49	6° 8 07'29		retrograde	-4664 Oct 04 j 04:37	26° 8 35'29	
				opposition	-4664 Dec 20 j 03:22	25° 8 13'09	0°-11'00
conjunction	-4671 Jun 07 j 15:44	8° 8 39'57	0°-48'-28	min. Earth dist.	-4664 Dec 20 j 23:35	25° 8 11'44	29.10949 AU
minimum elong	-4671 Jun 07 j 15:44	8° 8 39'57	0°48'21	direct	-4663 Mar 10 j 15:19	23° 8 47'44	
max. Earth dist.	-4671 Jun 06 j 19:57	8° 8 38'06	31.03080 AU				
retrograde	-4671 Sep 19 j 00:56	11° 8 08'39		conjunction	-4663 Jun 25 j 21:33	26° 8 20'10	0°-7'-42
opposition	-4671 Dec 05 j 01:39	9° 8 45'47	0°-49'-13	minimum elong	-4663 Jun 25 j 21:34	26° 8 20'10	0°07'31
min. Earth dist.	-4671 Dec 05 j 18:17	9° 8 44'37	29.03501 AU	behind sun begin	-4663 Jun 25 j 15:37	26° 8 19'39	
direct	-4670 Feb 23 j 00:42	8° 8 20'14		behind sun end	-4663 Jun 26 j 03:30	26° 8 20'42	
max. Earth dist.	-4670 Jun 09 j 09:18	10° 8 50'52	31.03873 AU	max. Earth dist.	-4663 Jun 24 j 22:48	26° 8 18'04	31.11393 AU
				retrograde	-4663 Oct 06 j 13:08	28° 8 47'53	
conjunction	-4670 Jun 10 j 04:38	10° 8 52'40	0°-43'-32	opposition	-4663 Dec 22 j 14:15	27° 8 25'37	0°-5'-26
minimum elong	-4670 Jun 10 j 04:39	10° 8 52'40	0°43'25	min. Earth dist.	-4663 Dec 23 j 11:44	27° 8 24'07	29.11867 AU
retrograde	-4670 Sep 21 j 10:04	13° 8 21'13		direct	-4662 Mar 13 j 03:49	26° 8 00'12	
opposition	-4670 Dec 07 j 12:11	11° 8 58'23	0°-43'-54	max. Earth dist.	-4662 Jun 27 j 09:21	28° 8 30'21	31.12265 AU
min. Earth dist.	-4670 Dec 08 j 06:09	11° 8 57'07	29.04354 AU				
direct	-4669 Feb 25 j 11:23	10° 8 32'48		conjunction	-4662 Jun 28 j 09:44	28° 8 32'37	0°-2'-29

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Attention, astronomical year style is used: The year -4662 in astronomical counting style is the year 4663 BCE in historical counting style.

minimum elong	-4662 Jun 28 j 09:44	28° R 32'37	0°02'19	minimum elong	-4655 Jul 13 j 20:11	13° II 55'31	0°33'53
behind sun begin	-4662 Jun 28 j 03:12	28° R 32'02		max. Earth dist.	-4655 Jul 12 j 18:51	13° II 53'09	31.18097 AU
behind sun end	-4662 Jun 28 j 16:16	28° R 33'12		retrograde	-4655 Oct 24 j 00:31	16° II 22'22	
	-4662 Aug 09 j 01:39	0° II		opposition	-4654 Jan 09 j 04:38	15° II 00'23	0°38'35
retrograde	-4662 Oct 09 j 00:00	1° II 00'12		min. Earth dist.	-4654 Jan 10 j 03:00	14° II 58'50	29.18695 AU
	-4662 Dec 11 j 16:46	30° R 8		direct	-4654 Mar 31 j 06:02	13° II 35'02	
asc. node	-4662 Dec 16 j 06:39	29° R 52'32		max. Earth dist.	-4654 Jul 15 j 07:18	16° II 04'49	31.19212 AU
opposition	-4662 Dec 25 j 00:56	29° R 37'58	0°00'08				
min. Earth dist.	-4662 Dec 25 j 22:08	29° R 36'29	29.12690 AU	conjunction	-4654 Jul 16 j 07:32	16° II 07'05	0°38'40
direct	-4661 Mar 15 j 15:28	28° R 12'33		minimum elong	-4654 Jul 16 j 07:31	16° II 07'05	0°38'53
	-4661 Jun 10 j 12:27	0° II		retrograde	-4654 Oct 26 j 09:18	18° II 33'53	
				opposition	-4653 Jan 11 j 15:44	17° II 11'58	0°43'54
conjunction	-4661 Jun 30 j 22:04	0° II 44'55	0°02'51	min. Earth dist.	-4653 Jan 12 j 14:59	17° II 10'22	29.19811 AU
minimum elong	-4661 Jun 30 j 22:06	0° II 44'55	0°03'03	direct	-4653 Apr 02 j 18:38	15° II 46'42	
behind sun begin	-4661 Jun 30 j 15:35	0° II 44'21					
behind sun end	-4661 Jul 01 j 04:36	0° II 45'30		conjunction	-4653 Jul 18 j 18:47	18° II 18'42	0°43'37
max. Earth dist.	-4661 Jun 29 j 21:55	0° II 42'41	31.13038 AU	minimum elong	-4653 Jul 18 j 18:47	18° II 18'42	0°43'51
retrograde	-4661 Oct 11 j 08:48	3° II 12'23		max. Earth dist.	-4653 Jul 17 j 17:24	18° II 16'20	31.20315 AU
opposition	-4661 Dec 27 j 11:39	1° II 50'11	0°05'42	retrograde	-4653 Oct 28 j 20:31	20° II 45'26	
min. Earth dist.	-4661 Dec 28 j 10:27	1° II 48'36	29.13432 AU	opposition	-4652 Jan 14 j 02:41	19° II 23'36	0°49'10
direct	-4660 Mar 17 j 01:56	0° II 24'45		min. Earth dist.	-4652 Jan 15 j 01:19	19° II 22'03	29.20887 AU
max. Earth dist.	-4660 Jul 01 j 09:11	2° II 54'44	31.13764 AU	direct	-4652 Apr 04 j 06:24	17° II 58'22	
				max. Earth dist.	-4652 Jul 19 j 05:21	20° II 28'01	31.21337 AU
conjunction	-4660 Jul 02 j 10:10	2° II 57'04	0°08'02				
minimum elong	-4660 Jul 02 j 10:10	2° II 57'04	0°08'14	conjunction	-4652 Jul 20 j 06:11	20° II 30'20	0°48'30
behind sun begin	-4660 Jul 02 j 04:24	2° II 56'33		minimum elong	-4652 Jul 20 j 06:11	20° II 30'20	0°48'44
behind sun end	-4660 Jul 02 j 15:56	2° II 57'35		retrograde	-4652 Oct 30 j 05:30	22° II 57'02	
retrograde	-4660 Oct 12 j 19:07	5° II 24'24		opposition	-4651 Jan 15 j 14:04	21° II 35'15	0°54'21
opposition	-4660 Dec 28 j 22:22	4° II 02'13	0°11'16	min. Earth dist.	-4651 Jan 16 j 14:01	21° II 33'36	29.21866 AU
min. Earth dist.	-4660 Dec 29 j 20:32	4° II 00'41	29.14142 AU	direct	-4651 Apr 06 j 17:19	20° II 10'04	
direct	-4659 Mar 19 j 15:48	2° II 36'46					
				conjunction	-4651 Jul 22 j 17:15	22° II 41'58	0°53'19
conjunction	-4659 Jul 04 j 21:59	5° II 09'01	0°13'13	minimum elong	-4651 Jul 22 j 17:15	22° II 41'58	0°53'33
minimum elong	-4659 Jul 04 j 21:59	5° II 09'01	0°13'26	max. Earth dist.	-4651 Jul 21 j 15:49	22° II 39'36	31.22253 AU
behind sun begin	-4659 Jul 04 j 18:21	5° II 08'42		retrograde	-4651 Nov 01 j 15:20	25° II 08'37	
behind sun end	-4659 Jul 05 j 01:37	5° II 09'21		opposition	-4650 Jan 18 j 01:20	23° II 46'52	0°59'28
max. Earth dist.	-4659 Jul 03 j 20:56	5° II 06'42	31.14470 AU	min. Earth dist.	-4650 Jan 19 j 00:33	23° II 45'16	29.22714 AU
retrograde	-4659 Oct 15 j 05:20	7° II 36'15		direct	-4650 Apr 09 j 06:19	22° II 21'42	
opposition	-4659 Dec 31 j 09:15	6° II 14'04	0°16'48	max. Earth dist.	-4650 Jul 24 j 02:46	24° II 51'08	31.23021 AU
min. Earth dist.	-4658 Jan 01 j 08:21	6° II 12'28	29.14876 AU				
direct	-4658 Mar 22 j 03:13	4° II 48'36		conjunction	-4650 Jul 25 j 04:26	24° II 53'32	0°58'04
max. Earth dist.	-4658 Jul 06 j 08:53	7° II 18'29	31.15233 AU	minimum elong	-4650 Jul 25 j 04:25	24° II 53'32	0°58'17
				retrograde	-4650 Nov 04 j 01:21	27° II 20'07	
conjunction	-4658 Jul 07 j 09:41	7° II 20'48	0°18'22	opposition	-4649 Jan 20 j 12:36	25° II 58'23	1°04'29
minimum elong	-4658 Jul 07 j 09:41	7° II 20'48	0°18'34	min. Earth dist.	-4649 Jan 21 j 12:54	25° II 56'42	29.23428 AU
retrograde	-4658 Oct 17 j 15:25	9° II 47'54		direct	-4649 Apr 11 j 16:46	24° II 33'14	
opposition	-4657 Jan 02 j 19:54	8° II 25'45	0°22'18				
min. Earth dist.	-4657 Jan 03 j 18:29	8° II 24'11	29.15674 AU	conjunction	-4649 Jul 27 j 15:31	27° II 04'59	1°02'43
direct	-4657 Mar 24 j 16:30	7° II 00'17		minimum elong	-4649 Jul 27 j 15:31	27° II 04'59	1°02'57
				max. Earth dist.	-4649 Jul 26 j 13:55	27° II 02'35	31.23663 AU
conjunction	-4657 Jul 09 j 21:16	9° II 32'26	0°23'30	retrograde	-4649 Nov 06 j 11:21	29° II 31'30	
minimum elong	-4657 Jul 09 j 21:16	9° II 32'26	0°23'43	opposition	-4648 Jan 22 j 23:57	28° II 09'46	1°09'24
max. Earth dist.	-4657 Jul 08 j 19:49	9° II 30'04	31.16077 AU	min. Earth dist.	-4648 Jan 23 j 23:53	28° II 08'07	29.23999 AU
retrograde	-4657 Oct 20 j 02:53	11° II 59'26		direct	-4648 Apr 13 j 05:59	26° II 44'37	
opposition	-4656 Jan 05 j 06:47	10° II 37'19	0°27'46	max. Earth dist.	-4648 Jul 27 j 23:59	29° II 13'49	31.24175 AU
min. Earth dist.	-4656 Jan 06 j 05:36	10° II 35'45	29.16584 AU				
direct	-4656 Mar 26 j 04:13	9° II 11'53		conjunction	-4648 Jul 29 j 02:20	29° II 16'16	1°07'16
max. Earth dist.	-4656 Jul 10 j 08:25	11° II 41'43	31.17038 AU	minimum elong	-4648 Jul 29 j 02:20	29° II 16'16	1°07'30
					-4648 Aug 17 j 20:20	0° II	
conjunction	-4656 Jul 11 j 08:49	11° II 43'59	0°28'36	retrograde	-4648 Nov 07 j 22:40	1° II 42'44	
minimum elong	-4656 Jul 11 j 08:49	11° II 43'59	0°28'49	opposition	-4647 Jan 24 j 11:22	0° II 20'58	1°14'13
retrograde	-4656 Oct 21 j 13:26	14° II 10'54		min. Earth dist.	-4647 Jan 25 j 11:37	0° II 19'19	29.24481 AU
opposition	-4655 Jan 06 j 17:43	12° II 48'51	0°33'12		-4647 Feb 06 j 08:07	30° R II	
min. Earth dist.	-4655 Jan 07 j 16:34	12° II 47'16	29.17591 AU	direct	-4647 Apr 15 j 17:52	28° II 55'49	
direct	-4655 Mar 28 j 18:34	11° II 23'27			-4647 Jun 19 j 23:43	0° II	
				max. Earth dist.	-4647 Jul 30 j 11:53	1° II 25'01	31.24619 AU
conjunction	-4655 Jul 13 j 20:11	13° II 55'31	0°33'39				

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Attention, astronomical year style is used: The year -4647 in astronomical counting style is the year 4648 BCE in historical counting style.

conjunction	-4647 Jul 31 j 13:08	1°☾27'23	1°11'43	opposition	-4638 Feb 13 j 19:36	19°☾58'44	1°51'51
minimum elong	-4647 Jul 31 j 13:07	1°☾27'23	1°11'58	min. Earth dist.	-4638 Feb 14 j 17:07	19°☾57'16	29.29674 AU
retrograde	-4647 Nov 10 j 08:42	3°☾53'46		direct	-4638 May 06 j 04:36	18°☾34'01	
opposition	-4646 Jan 26 j 22:47	2°☾32'00	1°18'55	max. Earth dist.	-4638 Aug 19 j 11:03	21°☾02'54	31.29752 AU
min. Earth dist.	-4646 Jan 27 j 23:05	2°☾30'20	29.24907 AU				
direct	-4646 Apr 18 j 08:02	1°☾06'50		conjunction	-4638 Aug 20 j 08:51	21°☾04'57	1°46'21
				minimum elong	-4638 Aug 20 j 08:51	21°☾04'57	1°46'34
conjunction	-4646 Aug 02 j 23:32	3°☾38'18	1°16'04	retrograde	-4638 Nov 30 j 04:51	23°☾31'26	
minimum elong	-4646 Aug 02 j 23:31	3°☾38'18	1°16'18	opposition	-4637 Feb 16 j 07:36	22°☾09'47	1°55'17
max. Earth dist.	-4646 Aug 01 j 21:32	3°☾35'52	31.25039 AU	min. Earth dist.	-4637 Feb 17 j 05:10	22°☾08'20	29.30050 AU
retrograde	-4646 Nov 12 j 19:41	6°☾04'39		direct	-4637 May 08 j 17:58	20°☾45'06	
opposition	-4645 Jan 29 j 10:08	4°☾42'51	1°23'30				
min. Earth dist.	-4645 Jan 30 j 09:39	4°☾41'14	29.25347 AU	conjunction	-4637 Aug 22 j 18:43	23°☾15'57	1°49'30
direct	-4645 Apr 20 j 19:42	3°☾17'41		minimum elong	-4637 Aug 22 j 18:43	23°☾15'57	1°49'44
max. Earth dist.	-4645 Aug 04 j 09:29	5°☾46'47	31.25489 AU	max. Earth dist.	-4637 Aug 21 j 20:04	23°☾13'50	31.30053 AU
				retrograde	-4637 Dec 02 j 16:13	25°☾42'27	
conjunction	-4645 Aug 05 j 10:02	5°☾49'04	1°20'18	opposition	-4636 Feb 18 j 19:31	24°☾20'47	1°58'34
minimum elong	-4645 Aug 05 j 10:02	5°☾49'04	1°20'32	min. Earth dist.	-4636 Feb 19 j 16:20	24°☾19'22	29.30289 AU
retrograde	-4645 Nov 15 j 04:18	8°☾15'22		direct	-4636 May 10 j 05:05	22°☾56'07	
opposition	-4644 Jan 31 j 21:36	6°☾53'35	1°27'57	max. Earth dist.	-4636 Aug 23 j 07:20	25°☾24'52	31.30216 AU
min. Earth dist.	-4644 Feb 01 j 21:28	6°☾51'56	29.25836 AU				
direct	-4644 Apr 22 j 08:55	5°☾28'27		conjunction	-4636 Aug 24 j 04:42	25°☾26'52	1°52'30
				minimum elong	-4636 Aug 24 j 04:42	25°☾26'52	1°52'42
conjunction	-4644 Aug 06 j 20:18	7°☾59'45	1°24'25	retrograde	-4636 Dec 04 j 01:49	27°☾53'22	
minimum elong	-4644 Aug 06 j 20:18	7°☾59'45	1°24'38	opposition	-4635 Feb 20 j 07:42	26°☾31'39	2°01'41
max. Earth dist.	-4644 Aug 05 j 19:19	7°☾57'25	31.26025 AU	min. Earth dist.	-4635 Feb 21 j 04:58	26°☾30'13	29.30397 AU
retrograde	-4644 Nov 16 j 15:27	10°☾26'02		direct	-4635 May 12 j 19:05	25°☾07'00	
opposition	-4643 Feb 02 j 09:04	9°☾04'15	1°32'17				
min. Earth dist.	-4643 Feb 03 j 07:28	9°☾02'43	29.26424 AU	conjunction	-4635 Aug 26 j 14:15	27°☾37'37	1°55'19
direct	-4643 Apr 24 j 21:00	7°☾39'10		minimum elong	-4635 Aug 26 j 14:14	27°☾37'37	1°55'33
max. Earth dist.	-4643 Aug 08 j 06:46	10°☾08'11	31.26649 AU	max. Earth dist.	-4635 Aug 25 j 16:27	27°☾35'34	31.30279 AU
					-4635 Nov 20 j 22:37	0°♂	
conjunction	-4643 Aug 09 j 06:29	10°☾10'25	1°28'24	retrograde	-4635 Dec 06 j 13:24	0°♂04'07	
minimum elong	-4643 Aug 09 j 06:28	10°☾10'25	1°28'39		-4635 Dec 22 j 04:50	30°♀☾	
retrograde	-4643 Nov 19 j 00:19	12°☾36'43		opposition	-4634 Feb 22 j 19:39	28°☾42'21	2°04'37
opposition	-4642 Feb 04 j 20:42	11°☾14'58	1°36'29	min. Earth dist.	-4634 Feb 23 j 15:32	28°☾41'00	29.30424 AU
min. Earth dist.	-4642 Feb 05 j 19:42	11°☾13'24	29.27096 AU	direct	-4634 May 15 j 08:12	27°☾17'41	
direct	-4642 Apr 27 j 07:57	9°☾49'58					
				conjunction	-4634 Aug 28 j 23:54	29°☾48'10	1°57'59
conjunction	-4642 Aug 11 j 16:36	12°☾21'08	1°32'16	minimum elong	-4634 Aug 28 j 23:54	29°☾48'10	1°58'11
minimum elong	-4642 Aug 11 j 16:36	12°☾21'08	1°32'30	max. Earth dist.	-4634 Aug 28 j 03:15	29°☾46'14	31.30271 AU
max. Earth dist.	-4642 Aug 10 j 17:05	12°☾18'56	31.27352 AU		-4634 Sep 03 j 05:56	0°♂	
retrograde	-4642 Nov 21 j 09:54	14°☾47'28		retrograde	-4634 Dec 08 j 21:57	2°♂14'40	
opposition	-4641 Feb 07 j 08:05	13°☾25'46	1°40'33	opposition	-4633 Feb 25 j 07:37	0°♂52'50	2°07'22
min. Earth dist.	-4641 Feb 08 j 05:48	13°☾24'17	29.27810 AU	min. Earth dist.	-4633 Feb 26 j 04:04	0°♂51'27	29.30418 AU
direct	-4641 Apr 29 j 19:59	12°☾00'50			-4633 Apr 01 j 08:30	30°♀☾	
max. Earth dist.	-4641 Aug 13 j 03:34	14°☾29'48	31.28057 AU	direct	-4633 May 17 j 20:03	29°☾28'10	
					-4633 Jul 01 j 16:34	0°♂	
conjunction	-4641 Aug 14 j 02:46	14°☾31'58	1°36'00				
minimum elong	-4641 Aug 14 j 02:46	14°☾31'58	1°36'15	conjunction	-4633 Aug 31 j 09:21	1°♂58'31	2°00'29
retrograde	-4641 Nov 23 j 20:12	16°☾58'20		minimum elong	-4633 Aug 31 j 09:21	1°♂58'31	2°00'41
opposition	-4640 Feb 09 j 19:52	15°☾36'40	1°44'28	max. Earth dist.	-4633 Aug 30 j 13:18	1°♂56'38	31.30275 AU
min. Earth dist.	-4640 Feb 10 j 18:06	15°☾35'09	29.28516 AU	retrograde	-4633 Dec 11 j 07:00	4°♂25'02	
direct	-4640 May 01 j 05:15	14°☾11'49		opposition	-4632 Feb 27 j 19:40	3°♂03'09	2°09'57
				min. Earth dist.	-4632 Feb 28 j 14:20	3°♂01'53	29.30444 AU
conjunction	-4640 Aug 15 j 12:47	16°☾42'54	1°39'36	direct	-4632 May 19 j 08:43	1°♂38'29	
minimum elong	-4640 Aug 15 j 12:46	16°☾42'54	1°39'50				
max. Earth dist.	-4640 Aug 14 j 14:20	16°☾40'48	31.28728 AU	conjunction	-4632 Sep 01 j 18:38	4°♂08'43	2°02'48
retrograde	-4640 Nov 25 j 06:20	19°☾09'19		minimum elong	-4632 Sep 01 j 18:38	4°♂08'43	2°02'59
opposition	-4639 Feb 11 j 07:44	17°☾47'41	1°48'14	max. Earth dist.	-4632 Aug 31 j 23:19	4°♂06'54	31.30329 AU
min. Earth dist.	-4639 Feb 12 j 05:12	17°☾46'13	29.29143 AU	retrograde	-4632 Dec 12 j 16:52	6°♂35'17	
direct	-4639 May 03 j 17:35	16°☾22'54		opposition	-4631 Mar 01 j 07:54	5°♂13'20	2°12'20
				min. Earth dist.	-4631 Mar 02 j 02:23	5°♂12'05	29.30560 AU
conjunction	-4639 Aug 17 j 22:48	18°☾53'55	1°43'03	direct	-4631 May 21 j 18:43	3°♂48'43	
minimum elong	-4639 Aug 17 j 22:48	18°☾53'55	1°43'17	max. Earth dist.	-4631 Sep 03 j 10:07	6°♂17'09	31.30494 AU
max. Earth dist.	-4639 Aug 16 j 23:49	18°☾51'45	31.29299 AU				
retrograde	-4639 Nov 27 j 18:18	21°☾20'22		conjunction	-4631 Sep 04 j 03:59	6°♂18'50	2°04'57

Attention, astronomical year style is used: The year -4631 in astronomical counting style is the year 4632 BCE in historical counting style.

minimum elong	-4631 Sep 04 j 03:59	6°Ω18'50	2°05'09	conjunction	-4623 Sep 21 j 05:38	23°Ω42'37	2°15'29
retrograde	-4631 Dec 15 j 02:29	8°Ω45'27		minimum elong	-4623 Sep 21 j 05:38	23°Ω42'37	2°15'39
opposition	-4630 Mar 03 j 19:55	7°Ω23'29	2°14'32	max. Earth dist.	-4623 Sep 20 j 16:35	23°Ω41'23	31.31521 AU
min. Earth dist.	-4630 Mar 04 j 12:58	7°Ω22'19	29.30769 AU	retrograde	-4622 Jan 01 j 17:43	26°Ω10'02	
direct	-4630 May 24 j 06:54	5°Ω58'55		opposition	-4622 Mar 21 j 23:30	24°Ω47'55	2°25'00
				min. Earth dist.	-4622 Mar 22 j 12:03	24°Ω47'04	29.31544 AU
conjunction	-4630 Sep 06 j 13:11	8°Ω28'56	2°06'55	direct	-4622 Jun 11 j 03:05	23°Ω23'54	
minimum elong	-4630 Sep 06 j 13:10	8°Ω28'56	2°07'06				
max. Earth dist.	-4630 Sep 05 j 19:20	8°Ω27'16	31.30746 AU	conjunction	-4622 Sep 23 j 14:46	25°Ω53'14	2°15'57
retrograde	-4630 Dec 17 j 14:08	10°Ω55'39		minimum elong	-4622 Sep 23 j 14:46	25°Ω53'14	2°16'05
opposition	-4629 Mar 06 j 08:05	9°Ω33'40	2°16'32	max. Earth dist.	-4622 Sep 23 j 03:03	25°Ω52'08	31.31195 AU
min. Earth dist.	-4629 Mar 07 j 00:30	9°Ω32'33	29.31063 AU	retrograde	-4621 Jan 04 j 03:18	28°Ω20'45	
direct	-4629 May 26 j 16:47	8°Ω09'11		opposition	-4621 Mar 24 j 12:06	26°Ω58'33	2°25'24
				min. Earth dist.	-4621 Mar 24 j 23:21	26°Ω57'47	29.31175 AU
conjunction	-4629 Sep 08 j 22:27	10°Ω39'08	2°08'42	direct	-4621 Jun 13 j 15:52	25°Ω34'33	
minimum elong	-4629 Sep 08 j 22:26	10°Ω39'08	2°08'54				
max. Earth dist.	-4629 Sep 08 j 06:30	10°Ω37'38	31.31055 AU	conjunction	-4621 Sep 25 j 23:35	28°Ω03'45	2°16'13
retrograde	-4629 Dec 20 j 00:29	13°Ω05'56		minimum elong	-4621 Sep 25 j 23:35	28°Ω03'45	2°16'22
opposition	-4628 Mar 07 j 20:23	11°Ω43'58	2°18'21	max. Earth dist.	-4621 Sep 25 j 11:54	28°Ω02'39	31.30813 AU
min. Earth dist.	-4628 Mar 08 j 12:17	11°Ω42'53	29.31376 AU		-4621 Nov 24 j 00:04	0°൬	
direct	-4628 May 28 j 04:40	10°Ω19'35		retrograde	-4620 Jan 06 j 14:37	0°൬31'22	
					-4620 Feb 21 j 02:18	30°℞Ω	
conjunction	-4628 Sep 10 j 07:35	12°Ω49'27	2°10'18	opposition	-4620 Mar 26 j 00:48	29°Ω09'04	2°25'35
minimum elong	-4628 Sep 10 j 07:35	12°Ω49'27	2°10'29	min. Earth dist.	-4620 Mar 26 j 11:15	29°Ω08'22	29.30805 AU
max. Earth dist.	-4628 Sep 09 j 15:24	12°Ω47'56	31.31371 AU	direct	-4620 Jun 15 j 01:45	27°Ω45'06	
	-4628 Nov 20 j 07:25	15°Ω			-4620 Sep 21 j 02:07	0°൬	
retrograde	-4628 Dec 21 j 12:44	15°Ω16'22					
	-4627 Jan 22 j 13:11	15°℞Ω		conjunction	-4620 Sep 27 j 08:35	0°൬14'11	2°16'18
opposition	-4627 Mar 10 j 08:44	13°Ω54'24	2°19'58	minimum elong	-4620 Sep 27 j 08:35	0°൬14'11	2°16'25
min. Earth dist.	-4627 Mar 10 j 23:22	13°Ω53'25	29.31684 AU	max. Earth dist.	-4620 Sep 26 j 23:03	0°൬13'17	31.30458 AU
direct	-4627 May 30 j 14:50	12°Ω30'06		retrograde	-4619 Jan 08 j 00:40	2°൬41'53	
				opposition	-4619 Mar 28 j 13:31	1°൬19'31	2°25'34
conjunction	-4627 Sep 12 j 16:49	14°Ω59'55	2°11'43	min. Earth dist.	-4619 Mar 28 j 23:04	1°൬18'53	29.30478 AU
minimum elong	-4627 Sep 12 j 16:49	14°Ω59'55	2°11'54		-4619 May 31 j 22:15	30°℞Ω	
max. Earth dist.	-4627 Sep 12 j 02:15	14°Ω58'33	31.31637 AU	direct	-4619 Jun 17 j 12:58	29°Ω55'35	
	-4627 Sep 12 j 17:41	15°Ω			-4619 Jul 03 j 23:40	0°൬	
retrograde	-4627 Dec 23 j 23:15	17°Ω26'57					
opposition	-4626 Mar 12 j 21:15	16°Ω04'58	2°21'22	conjunction	-4619 Sep 29 j 17:19	2°൬24'33	2°16'11
min. Earth dist.	-4626 Mar 13 j 12:08	16°Ω03'58	29.31909 AU	minimum elong	-4619 Sep 29 j 17:19	2°൬24'33	2°16'19
	-4626 Apr 27 j 15:19	15°℞Ω		max. Earth dist.	-4619 Sep 29 j 07:54	2°൬23'40	31.30176 AU
direct	-4626 Jun 02 j 03:52	14°Ω40'46		retrograde	-4618 Jan 10 j 12:53	4°൬52'22	
	-4626 Jul 06 j 17:52	15°Ω		opposition	-4618 Mar 31 j 02:08	3°൬29'57	2°25'21
max. Earth dist.	-4626 Sep 14 j 11:11	17°Ω09'07	31.31813 AU	min. Earth dist.	-4618 Mar 31 j 09:57	3°൬29'25	29.30241 AU
				direct	-4618 Jun 19 j 22:57	2°൬06'04	
conjunction	-4626 Sep 15 j 02:00	17°Ω10'30	2°12'56				
minimum elong	-4626 Sep 15 j 02:00	17°Ω10'30	2°13'06	conjunction	-4618 Oct 02 j 02:16	4°൬34'56	2°15'53
retrograde	-4626 Dec 26 j 11:44	19°Ω37'38		minimum elong	-4618 Oct 02 j 02:16	4°൬34'56	2°15'58
opposition	-4625 Mar 15 j 09:33	18°Ω15'39	2°22'35	max. Earth dist.	-4618 Oct 01 j 18:47	4°൬34'14	31.29973 AU
min. Earth dist.	-4625 Mar 15 j 22:57	18°Ω14'45	29.32022 AU	retrograde	-4617 Jan 12 j 23:55	7°൬02'53	
direct	-4625 Jun 04 j 16:15	16°Ω51'31		opposition	-4617 Apr 02 j 14:48	5°൬40'25	2°24'54
				min. Earth dist.	-4617 Apr 02 j 22:19	5°൬39'54	29.30072 AU
conjunction	-4625 Sep 17 j 11:19	19°Ω21'11	2°13'59	direct	-4617 Jun 22 j 11:24	4°൬16'36	
minimum elong	-4625 Sep 17 j 11:19	19°Ω21'11	2°14'09				
max. Earth dist.	-4625 Sep 16 j 21:27	19°Ω19'53	31.31850 AU	conjunction	-4617 Oct 04 j 11:06	6°൬45'24	2°15'22
retrograde	-4625 Dec 28 j 21:30	21°Ω48'26		minimum elong	-4617 Oct 04 j 11:06	6°൬45'24	2°15'29
opposition	-4624 Mar 16 j 22:18	20°Ω26'25	2°23'36	max. Earth dist.	-4617 Oct 04 j 04:03	6°൬44'44	31.29848 AU
min. Earth dist.	-4624 Mar 17 j 12:15	20°Ω25'28	29.31997 AU	retrograde	-4616 Jan 15 j 13:03	9°൬13'28	
direct	-4624 Jun 06 j 03:53	19°Ω02'20		opposition	-4616 Apr 04 j 03:33	7°൬50'58	2°24'16
				min. Earth dist.	-4616 Apr 04 j 09:00	7°൬50'36	29.29961 AU
conjunction	-4624 Sep 18 j 20:27	21°Ω31'54	2°14'49	direct	-4616 Jun 23 j 22:58	6°൬27'15	
minimum elong	-4624 Sep 18 j 20:27	21°Ω31'54	2°14'58				
max. Earth dist.	-4624 Sep 18 j 07:09	21°Ω30'39	31.31758 AU	conjunction	-4616 Oct 05 j 19:55	8°൬55'58	2°14'40
retrograde	-4624 Dec 30 j 07:17	23°Ω59'14		minimum elong	-4616 Oct 05 j 19:55	8°൬55'58	2°14'45
opposition	-4623 Mar 19 j 10:55	22°Ω37'11	2°24'24	max. Earth dist.	-4616 Oct 05 j 14:13	8°൬55'25	31.29742 AU
min. Earth dist.	-4623 Mar 19 j 23:18	22°Ω36'21	29.31827 AU	retrograde	-4615 Jan 16 j 23:31	11°൬24'12	
direct	-4623 Jun 08 j 16:47	21°Ω13'09		opposition	-4615 Apr 06 j 16:31	10°൬01'40	2°23'24
				min. Earth dist.	-4615 Apr 06 j 22:08	10°൬01'17	29.29853 AU

Attention, astronomical year style is used: The year -4615 in astronomical counting style is the year 4616 BCE in historical counting style.

direct	-4615 Jun 26 j 10:04	8° \mathring{M} 38'02		minimum elong	-4607 Oct 25 j 05:05	28° \mathring{M} 33'40	1°59'53
				max. Earth dist.	-4607 Oct 25 j 06:40	28° \mathring{M} 33'49	31.24773 AU
conjunction	-4615 Oct 08 j 04:54	11° \mathring{M} 06'40	2°13'46		-4607 Dec 04 j 17:09	0° \mathring{M}	
minimum elong	-4615 Oct 08 j 04:54	11° \mathring{M} 06'40	2°13'52	retrograde	-4606 Feb 06 j 05:30	1° \mathring{M} 03'08	
max. Earth dist.	-4615 Oct 08 j 00:14	11° \mathring{M} 06'13	31.29626 AU		-4606 Apr 15 j 00:30	30° \mathring{R} \mathring{M}	
retrograde	-4614 Jan 19 j 10:24	13° \mathring{M} 35'02		opposition	-4606 Apr 27 j 13:15	29° \mathring{M} 39'56	2°06'43
opposition	-4614 Apr 09 j 05:12	12° \mathring{M} 12'29	2°22'21	min. Earth dist.	-4606 Apr 27 j 11:20	29° \mathring{M} 40'04	29.24527 AU
min. Earth dist.	-4614 Apr 09 j 09:06	12° \mathring{M} 12'13	29.29697 AU	direct	-4606 Jul 16 j 16:23	28° \mathring{M} 16'38	
direct	-4614 Jun 28 j 23:00	10° \mathring{M} 48'55			-4606 Oct 07 j 17:39	0° \mathring{M}	
conjunction	-4614 Oct 10 j 13:54	13° \mathring{M} 17'29	2°12'41	conjunction	-4606 Oct 27 j 14:07	0° \mathring{M} 44'25	1°57'19
minimum elong	-4614 Oct 10 j 13:54	13° \mathring{M} 17'29	2°12'45	minimum elong	-4606 Oct 27 j 14:07	0° \mathring{M} 44'25	1°57'20
max. Earth dist.	-4614 Oct 10 j 09:27	13° \mathring{M} 17'04	31.29423 AU	max. Earth dist.	-4606 Oct 27 j 17:09	0° \mathring{M} 44'42	31.24043 AU
retrograde	-4613 Jan 21 j 22:04	15° \mathring{M} 46'00		retrograde	-4605 Feb 08 j 17:05	3° \mathring{M} 14'02	
opposition	-4613 Apr 11 j 18:14	14° \mathring{M} 23'25	2°21'05	opposition	-4605 Apr 30 j 02:09	1° \mathring{M} 50'46	2°03'55
min. Earth dist.	-4613 Apr 11 j 22:11	14° \mathring{M} 23'09	29.29447 AU	min. Earth dist.	-4605 Apr 29 j 22:03	1° \mathring{M} 51'03	29.23828 AU
direct	-4613 Jul 01 j 09:49	12° \mathring{M} 59'56		direct	-4605 Jul 19 j 05:21	0° \mathring{M} 27'32	
conjunction	-4613 Oct 12 j 22:56	15° \mathring{M} 28'24	2°11'24	conjunction	-4605 Oct 29 j 22:57	2° \mathring{M} 55'16	1°54'37
minimum elong	-4613 Oct 12 j 22:57	15° \mathring{M} 28'24	2°11'28	minimum elong	-4605 Oct 29 j 22:58	2° \mathring{M} 55'16	1°54'38
max. Earth dist.	-4613 Oct 12 j 19:57	15° \mathring{M} 28'07	31.29112 AU	max. Earth dist.	-4605 Oct 30 j 02:32	2° \mathring{M} 55'36	31.23389 AU
retrograde	-4612 Jan 24 j 08:02	17° \mathring{M} 57'04		retrograde	-4604 Feb 11 j 05:31	5° \mathring{M} 25'04	
opposition	-4612 Apr 13 j 07:17	16° \mathring{M} 34'26	2°19'36	opposition	-4604 May 01 j 15:16	4° \mathring{M} 01'45	2°00'55
min. Earth dist.	-4612 Apr 13 j 09:58	16° \mathring{M} 34'15	29.29054 AU	min. Earth dist.	-4604 May 01 j 10:46	4° \mathring{M} 02'03	29.23213 AU
direct	-4612 Jul 02 j 22:27	15° \mathring{M} 11'00		direct	-4604 Jul 20 j 16:08	2° \mathring{M} 38'35	
conjunction	-4612 Oct 14 j 08:01	17° \mathring{M} 39'23	2°09'55	conjunction	-4604 Oct 31 j 08:06	5° \mathring{M} 06'15	1°51'44
minimum elong	-4612 Oct 14 j 08:01	17° \mathring{M} 39'23	2°09'59	minimum elong	-4604 Oct 31 j 08:06	5° \mathring{M} 06'15	1°51'43
max. Earth dist.	-4612 Oct 14 j 04:39	17° \mathring{M} 39'04	31.28651 AU	max. Earth dist.	-4604 Oct 31 j 13:38	5° \mathring{M} 06'47	31.22810 AU
retrograde	-4611 Jan 25 j 19:42	20° \mathring{M} 08'11		retrograde	-4603 Feb 12 j 15:43	7° \mathring{M} 36'14	
opposition	-4611 Apr 15 j 20:20	18° \mathring{M} 45'29	2°17'56	opposition	-4603 May 04 j 04:11	6° \mathring{M} 12'53	1°57'45
min. Earth dist.	-4611 Apr 15 j 22:33	18° \mathring{M} 45'20	29.28521 AU	min. Earth dist.	-4603 May 03 j 22:05	6° \mathring{M} 13'18	29.22639 AU
direct	-4611 Jul 05 j 08:19	17° \mathring{M} 22'05		direct	-4603 Jul 23 j 04:13	4° \mathring{M} 49'48	
conjunction	-4611 Oct 16 j 17:10	19° \mathring{M} 50'22	2°08'16	conjunction	-4603 Nov 02 j 17:07	7° \mathring{M} 17'25	1°48'41
minimum elong	-4611 Oct 16 j 17:11	19° \mathring{M} 50'22	2°08'20	minimum elong	-4603 Nov 02 j 17:08	7° \mathring{M} 17'25	1°48'41
max. Earth dist.	-4611 Oct 16 j 15:31	19° \mathring{M} 50'13	31.28039 AU	max. Earth dist.	-4603 Nov 02 j 22:36	7° \mathring{M} 17'56	31.22254 AU
retrograde	-4610 Jan 28 j 05:50	22° \mathring{M} 19'18		retrograde	-4602 Feb 15 j 03:32	9° \mathring{M} 47'35	
opposition	-4610 Apr 18 j 09:22	20° \mathring{M} 56'30	2°16'04	opposition	-4602 May 06 j 17:14	8° \mathring{M} 24'12	1°54'25
min. Earth dist.	-4610 Apr 18 j 11:09	20° \mathring{M} 56'23	29.27823 AU	min. Earth dist.	-4602 May 06 j 10:27	8° \mathring{M} 24'40	29.22077 AU
direct	-4610 Jul 07 j 19:50	19° \mathring{M} 33'08		direct	-4602 Jul 25 j 13:56	7° \mathring{M} 01'11	
conjunction	-4610 Oct 19 j 02:09	22° \mathring{M} 01'18	2°06'26	conjunction	-4602 Nov 05 j 02:22	9° \mathring{M} 28'47	1°45'29
minimum elong	-4610 Oct 19 j 02:10	22° \mathring{M} 01'18	2°06'28	minimum elong	-4602 Nov 05 j 02:22	9° \mathring{M} 28'47	1°45'26
max. Earth dist.	-4610 Oct 19 j 00:15	22° \mathring{M} 01'07	31.27289 AU	max. Earth dist.	-4602 Nov 05 j 09:48	9° \mathring{M} 29'29	31.21671 AU
retrograde	-4609 Jan 30 j 18:23	24° \mathring{M} 30'22		retrograde	-4601 Feb 17 j 14:04	11° \mathring{M} 59'08	
opposition	-4609 Apr 20 j 22:17	23° \mathring{M} 07'28	2°14'01	opposition	-4601 May 09 j 06:17	10° \mathring{M} 35'43	1°50'54
min. Earth dist.	-4609 Apr 20 j 22:44	23° \mathring{M} 07'26	29.27018 AU	min. Earth dist.	-4601 May 08 j 22:56	10° \mathring{M} 36'13	29.21456 AU
direct	-4609 Jul 10 j 06:10	21° \mathring{M} 44'06		direct	-4601 Jul 28 j 00:58	9° \mathring{M} 12'46	
conjunction	-4609 Oct 21 j 11:13	24° \mathring{M} 12'10	2°04'25	conjunction	-4601 Nov 07 j 11:37	11° \mathring{M} 40'18	1°42'07
minimum elong	-4609 Oct 21 j 11:14	24° \mathring{M} 12'10	2°04'28	minimum elong	-4601 Nov 07 j 11:38	11° \mathring{M} 40'18	1°42'05
max. Earth dist.	-4609 Oct 21 j 10:59	24° \mathring{M} 12'08	31.26446 AU	max. Earth dist.	-4601 Nov 07 j 18:55	11° \mathring{M} 41'00	31.21027 AU
retrograde	-4608 Feb 02 j 05:35	26° \mathring{M} 41'21		retrograde	-4600 Feb 20 j 03:18	14° \mathring{M} 10'51	
opposition	-4608 Apr 22 j 11:25	25° \mathring{M} 18'20	2°11'46	opposition	-4600 May 10 j 19:25	12° \mathring{M} 47'22	1°47'13
min. Earth dist.	-4608 Apr 22 j 11:39	25° \mathring{M} 18'19	29.26153 AU	min. Earth dist.	-4600 May 10 j 10:49	12° \mathring{M} 47'57	29.20763 AU
direct	-4608 Jul 11 j 18:11	23° \mathring{M} 55'00		direct	-4600 Jul 29 j 11:01	11° \mathring{M} 24'28	
conjunction	-4608 Oct 22 j 20:04	26° \mathring{M} 22'56	2°02'14	conjunction	-4600 Nov 08 j 21:03	13° \mathring{M} 51'58	1°38'36
minimum elong	-4608 Oct 22 j 20:04	26° \mathring{M} 22'56	2°02'14	minimum elong	-4600 Nov 08 j 21:04	13° \mathring{M} 51'58	1°38'33
max. Earth dist.	-4608 Oct 22 j 20:25	26° \mathring{M} 22'58	31.25595 AU	max. Earth dist.	-4600 Nov 09 j 05:40	13° \mathring{M} 52'47	31.20272 AU
retrograde	-4607 Feb 03 j 18:40	28° \mathring{M} 52'15		retrograde	-4599 Feb 21 j 14:56	16° \mathring{M} 22'41	
opposition	-4607 Apr 25 j 00:21	27° \mathring{M} 29'08	2°09'20	opposition	-4599 May 13 j 08:39	14° \mathring{M} 59'08	1°43'24
min. Earth dist.	-4607 Apr 24 j 22:29	27° \mathring{M} 29'16	29.25309 AU	min. Earth dist.	-4599 May 13 j 00:10	14° \mathring{M} 59'42	29.19938 AU
direct	-4607 Jul 14 j 05:29	26° \mathring{M} 05'48		direct	-4599 Jul 31 j 22:04	13° \mathring{M} 36'16	
conjunction	-4607 Oct 25 j 05:05	28° \mathring{M} 33'40	1°59'52	conjunction	-4599 Nov 11 j 06:36	16° \mathring{M} 03'41	1°34'57

Attention, astronomical year style is used: The year -4599 in astronomical counting style is the year 4600 BCE in historical counting style.

minimum elong	-4599 Nov 11 j 06:37	16° 0 03'41	1°34'54	minimum elong	-4591 Nov 28 j 11:13	3° 0 36'04	1°01'10
max. Earth dist.	-4599 Nov 11 j 15:23	16° 0 04'31	31.19393 AU	max. Earth dist.	-4591 Nov 29 j 03:40	3° 0 37'38	31.11556 AU
retrograde	-4598 Feb 24 j 04:13	18° 0 34'33		retrograde	-4590 Mar 14 j 03:16	6° 0 08'04	
opposition	-4598 May 15 j 21:33	17° 0 10'55	1°39'25	opposition	-4590 Jun 03 j 04:59	4° 0 43'45	1°02'55
min. Earth dist.	-4598 May 15 j 11:30	17° 0 11'36	29.18981 AU	min. Earth dist.	-4590 Jun 02 j 12:39	4° 0 44'52	29.11258 AU
direct	-4598 Aug 03 j 08:31	15° 0 48'03		direct	-4590 Aug 21 j 02:25	3° 0 21'00	
conjunction	-4598 Nov 13 j 16:09	18° 0 15'25	1°31'10	conjunction	-4590 Nov 30 j 21:08	5° 0 47'59	0°56'34
minimum elong	-4598 Nov 13 j 16:09	18° 0 15'25	1°31'06	minimum elong	-4590 Nov 30 j 21:08	5° 0 47'59	0°56'26
max. Earth dist.	-4598 Nov 14 j 01:31	18° 0 16'18	31.18373 AU	max. Earth dist.	-4590 Dec 01 j 14:10	5° 0 49'36	31.10880 AU
retrograde	-4597 Feb 26 j 16:05	20° 0 46'24		retrograde	-4589 Mar 16 j 16:59	8° 0 20'10	
opposition	-4597 May 18 j 10:45	19° 0 22'40	1°35'18	opposition	-4589 Jun 05 j 17:51	6° 0 55'50	0°57'51
min. Earth dist.	-4597 May 18 j 01:07	19° 0 23'19	29.17905 AU	min. Earth dist.	-4589 Jun 04 j 23:49	6° 0 57'04	29.10576 AU
direct	-4597 Aug 05 j 19:37	17° 0 59'47		direct	-4589 Aug 23 j 12:11	5° 0 33'08	
conjunction	-4597 Nov 16 j 01:35	20° 0 27'03	1°27'14	conjunction	-4589 Dec 03 j 07:04	8° 0 00'09	0°51'47
minimum elong	-4597 Nov 16 j 01:36	20° 0 27'04	1°27'11	minimum elong	-4589 Dec 03 j 07:05	8° 0 00'09	0°51'40
max. Earth dist.	-4597 Nov 16 j 12:14	20° 0 28'04	31.17269 AU	max. Earth dist.	-4589 Dec 04 j 00:42	8° 0 01'49	31.10184 AU
retrograde	-4596 Feb 29 j 04:50	22° 0 58'10		retrograde	-4588 Mar 18 j 05:51	10° 0 32'32	
opposition	-4596 May 19 j 23:46	21° 0 34'18	1°31'02	opposition	-4588 Jun 07 j 06:55	9° 0 08'10	0°52'41
min. Earth dist.	-4596 May 19 j 12:20	21° 0 35'04	29.16763 AU	min. Earth dist.	-4588 Jun 06 j 13:26	9° 0 09'22	29.09860 AU
direct	-4596 Aug 07 j 08:58	20° 0 11'24		direct	-4588 Aug 24 j 22:30	7° 0 45'31	
conjunction	-4596 Nov 17 j 11:03	22° 0 38'36	1°23'12	conjunction	-4588 Dec 04 j 17:25	10° 0 12'33	0°46'55
minimum elong	-4596 Nov 17 j 11:03	22° 0 38'36	1°23'07	minimum elong	-4588 Dec 04 j 17:26	10° 0 12'33	0°46'47
max. Earth dist.	-4596 Nov 17 j 21:50	22° 0 39'37	31.16123 AU	max. Earth dist.	-4588 Dec 05 j 12:06	10° 0 14'19	31.09440 AU
retrograde	-4595 Mar 02 j 17:43	25° 0 09'49		retrograde	-4587 Mar 20 j 19:58	12° 0 45'05	
opposition	-4595 May 22 j 12:42	23° 0 45'50	1°26'39	opposition	-4587 Jun 09 j 19:40	11° 0 20'42	0°47'27
min. Earth dist.	-4595 May 22 j 01:13	23° 0 46'37	29.15631 AU	min. Earth dist.	-4587 Jun 09 j 00:50	11° 0 21'59	29.09061 AU
direct	-4595 Aug 09 j 19:57	22° 0 22'55		direct	-4587 Aug 27 j 10:59	9° 0 58'05	
conjunction	-4595 Nov 19 j 20:40	24° 0 50'02	1°19'02	conjunction	-4587 Dec 07 j 03:46	12° 0 25'08	0°41'59
minimum elong	-4595 Nov 19 j 20:40	24° 0 50'02	1°18'58	minimum elong	-4587 Dec 07 j 03:46	12° 0 25'08	0°41'51
max. Earth dist.	-4595 Nov 20 j 09:21	24° 0 51'14	31.15017 AU	max. Earth dist.	-4587 Dec 07 j 21:57	12° 0 26'51	31.08583 AU
retrograde	-4594 Mar 05 j 03:57	27° 0 21'23		retrograde	-4586 Mar 23 j 10:01	14° 0 57'51	
opposition	-4594 May 25 j 01:31	25° 0 57'17	1°22'09	opposition	-4586 Jun 12 j 08:41	13° 0 33'24	0°42'08
min. Earth dist.	-4594 May 24 j 12:24	25° 0 58'11	29.14552 AU	min. Earth dist.	-4586 Jun 11 j 14:22	13° 0 34'39	29.08147 AU
direct	-4594 Aug 12 j 08:26	24° 0 34'22		direct	-4586 Aug 29 j 21:37	12° 0 10'48	
conjunction	-4594 Nov 22 j 06:03	27° 0 01'25	1°14'45	conjunction	-4586 Dec 09 j 14:13	14° 0 37'51	0°36'59
minimum elong	-4594 Nov 22 j 06:03	27° 0 01'25	1°14'39	minimum elong	-4586 Dec 09 j 14:14	14° 0 37'51	0°36'49
max. Earth dist.	-4594 Nov 22 j 18:46	27° 0 02'38	31.13992 AU	max. Earth dist.	-4586 Dec 10 j 09:45	14° 0 39'42	31.07606 AU
retrograde	-4593 Mar 07 j 16:06	29° 0 32'55		retrograde	-4586 Dec 19 j 08:39	15° 0	
opposition	-4593 May 27 j 14:25	28° 0 08'44	1°17'31	opposition	-4585 Mar 25 j 21:35	17° 0 10'42	
min. Earth dist.	-4593 May 27 j 00:26	28° 0 09'41	29.13583 AU	opposition	-4585 Jun 14 j 21:35	15° 0 46'12	0°36'45
direct	-4593 Aug 14 j 18:55	26° 0 45'50		min. Earth dist.	-4585 Jun 14 j 02:14	15° 0 47'31	29.07099 AU
conjunction	-4593 Nov 24 j 15:45	29° 0 12'51	1°10'22	direct	-4585 Jul 14 j 18:29	15° 0 48'11	
minimum elong	-4593 Nov 24 j 15:45	29° 0 12'51	1°10'17	direct	-4585 Sep 01 j 10:14	14° 0 23'35	
max. Earth dist.	-4593 Nov 25 j 06:35	29° 0 14'15	31.13080 AU	direct	-4585 Oct 18 j 00:37	15° 0	
retrograde	-4592 Mar 09 j 02:55	1° 0 44'30		conjunction	-4585 Dec 12 j 00:41	16° 0 50'37	0°31'55
opposition	-4592 May 29 j 03:19	0° 0 20'15	1°12'45	minimum elong	-4585 Dec 12 j 00:41	16° 0 50'37	0°31'47
min. Earth dist.	-4592 May 28 j 12:27	0° 0 21'16	29.12721 AU	max. Earth dist.	-4585 Dec 12 j 19:33	16° 0 52'24	31.06518 AU
direct	-4592 Jun 10 j 16:08	30° 0 45'23		retrograde	-4584 Mar 27 j 11:11	19° 0 23'35	
conjunction	-4592 Nov 26 j 01:21	1° 0 24'22	1°05'52	opposition	-4584 Jun 16 j 10:28	17° 0 59'00	0°31'19
minimum elong	-4592 Nov 26 j 01:21	1° 0 24'22	1°05'45	min. Earth dist.	-4584 Jun 15 j 14:59	18° 0 00'19	29.05974 AU
max. Earth dist.	-4592 Nov 26 j 16:23	1° 0 25'48	31.12285 AU	direct	-4584 Sep 02 j 21:31	16° 0 36'22	
retrograde	-4591 Mar 11 j 15:57	3° 0 56'11		conjunction	-4584 Dec 13 j 11:17	19° 0 03'23	0°26'50
opposition	-4591 May 31 j 16:11	2° 0 31'54	1°07'54	minimum elong	-4584 Dec 13 j 11:17	19° 0 03'23	0°26'39
min. Earth dist.	-4591 May 30 j 23:52	2° 0 33'01	29.11965 AU	max. Earth dist.	-4584 Dec 14 j 07:44	19° 0 05'19	31.05363 AU
direct	-4591 Aug 18 j 16:12	1° 0 09'05		retrograde	-4583 Mar 29 j 22:39	21° 0 36'27	
conjunction	-4591 Nov 28 j 11:12	3° 0 36'04	1°01'16	opposition	-4583 Jun 18 j 23:13	20° 0 11'46	0°25'51
				min. Earth dist.	-4583 Jun 18 j 03:24	20° 0 13'07	29.04802 AU
				direct	-4583 Sep 05 j 09:52	18° 0 49'06	
				conjunction	-4583 Dec 15 j 21:50	21° 0 16'05	0°21'41

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Attention, astronomical year style is used: The year -4583 in astronomical counting style is the year 4584 BCE in historical counting style.

minimum elong	-4583 Dec 15 j 21:50	21°M16'05	0°21'31	opposition	-4576 Jul 04 j 15:03	5°Z42'18	0°-13'-11
max. Earth dist.	-4583 Dec 16 j 18:06	21°M18'00	31.04206 AU	min. Earth dist.	-4576 Jul 03 j 15:09	5°Z43'57	28.98766 AU
retrograde	-4582 Apr 01 j 11:02	23°M49'16		direct	-4576 Sep 20 j 12:39	4°Z19'37	
opposition	-4582 Jun 21 j 11:47	22°M24'29	0°20'20				
min. Earth dist.	-4582 Jun 20 j 14:57	22°M25'55	29.03669 AU	conjunction	-4576 Dec 31 j 02:36	6°Z46'50	0°-14'-54
direct	-4582 Sep 07 j 20:23	21°M01'48		minimum elong	-4576 Dec 31 j 02:35	6°Z46'50	0°15'08
				behind sun begin	-4576 Dec 31 j 00:20	6°Z46'37	
conjunction	-4582 Dec 18 j 08:30	23°M28'47	0°16'31	behind sun end	-4576 Dec 31 j 04:51	6°Z47'02	
minimum elong	-4582 Dec 18 j 08:30	23°M28'47	0°16'20	max. Earth dist.	-4575 Jan 01 j 02:38	6°Z49'06	30.98393 AU
max. Earth dist.	-4582 Dec 19 j 05:59	23°M30'48	31.03100 AU	retrograde	-4575 Apr 17 j 07:14	9°Z20'52	
retrograde	-4581 Apr 03 j 21:33	26°M02'04		min. Earth dist.	-4575 Jul 06 j 03:59	7°Z57'28	28.98061 AU
min. Earth dist.	-4581 Jun 23 j 03:38	24°M38'39	29.02614 AU	opposition	-4575 Jul 07 j 03:38	7°Z55'50	0°-18'-46
opposition	-4581 Jun 24 j 00:29	24°M37'13	0°14'47	direct	-4575 Sep 22 j 23:51	6°Z33'09	
direct	-4581 Sep 10 j 06:53	23°M14'30					
				conjunction	-4574 Jan 02 j 14:16	9°Z00'26	0°-20'-7
conjunction	-4581 Dec 20 j 19:08	25°M41'29	0°11'20	minimum elong	-4574 Jan 02 j 14:16	9°Z00'26	0°20'20
minimum elong	-4581 Dec 20 j 19:08	25°M41'29	0°11'10	max. Earth dist.	-4574 Jan 03 j 15:23	9°Z02'48	30.97631 AU
behind sun begin	-4581 Dec 20 j 14:20	25°M41'03		retrograde	-4574 Apr 19 j 19:26	11°Z34'35	
behind sun end	-4581 Dec 20 j 23:57	25°M41'55		opposition	-4574 Jul 09 j 16:06	10°Z09'31	0°-24'-20
max. Earth dist.	-4581 Dec 21 j 17:14	25°M43'34	31.02109 AU	min. Earth dist.	-4574 Jul 08 j 16:36	10°Z11'09	28.97247 AU
retrograde	-4580 Apr 05 j 11:03	28°M14'53		direct	-4574 Sep 25 j 12:11	8°Z46'50	
opposition	-4580 Jun 25 j 13:03	26°M49'58	0°09'13				
min. Earth dist.	-4580 Jun 24 j 14:32	26°M51'31	29.01677 AU	conjunction	-4573 Jan 05 j 02:00	11°Z14'10	0°-25'-18
direct	-4580 Sep 11 j 16:46	25°M27'15		minimum elong	-4573 Jan 05 j 01:59	11°Z14'10	0°25'32
				max. Earth dist.	-4573 Jan 06 j 02:16	11°Z16'27	30.96769 AU
conjunction	-4580 Dec 22 j 06:00	27°M54'15	0°06'08	retrograde	-4573 Apr 22 j 09:16	13°Z48'25	
minimum elong	-4580 Dec 22 j 06:00	27°M54'15	0°05'57	min. Earth dist.	-4573 Jul 11 j 04:49	12°Z24'57	28.96329 AU
behind sun begin	-4580 Dec 21 j 23:50	27°M53'41		opposition	-4573 Jul 12 j 04:39	12°Z23'19	0°-29'-52
behind sun end	-4580 Dec 22 j 12:09	27°M54'48		direct	-4573 Sep 27 j 23:07	11°Z00'36	
max. Earth dist.	-4580 Dec 23 j 04:34	27°M56'22	31.01219 AU				
	-4579 Feb 25 j 06:09	0°Z		conjunction	-4572 Jan 07 j 13:49	13°Z27'58	0°-30'-27
retrograde	-4579 Apr 07 j 23:13	0°Z27'47		minimum elong	-4572 Jan 07 j 13:48	13°Z27'58	0°30'40
	-4579 May 20 j 23:15	30°RM		max. Earth dist.	-4572 Jan 08 j 14:31	13°Z30'18	30.95781 AU
min. Earth dist.	-4579 Jun 27 j 03:30	29°M04'20	29.00848 AU	retrograde	-4572 Apr 23 j 20:43	16°Z02'18	
opposition	-4579 Jun 28 j 01:32	29°M02'49	0°03'37	opposition	-4572 Jul 13 j 17:11	14°Z37'08	0°-35'-21
direct	-4579 Sep 14 j 02:52	27°M40'06		min. Earth dist.	-4572 Jul 12 j 18:08	14°Z38'43	28.95289 AU
	-4579 Dec 21 j 13:34	0°Z		direct	-4572 Sep 29 j 10:24	13°Z14'22	
conjunction	-4579 Dec 24 j 16:59	0°Z07'08	0°00'52	conjunction	-4571 Jan 09 j 01:47	15°Z41'46	0°-35'-33
minimum elong	-4579 Dec 24 j 17:00	0°Z07'08	0°00'41	minimum elong	-4571 Jan 09 j 01:47	15°Z41'46	0°35'48
behind sun begin	-4579 Dec 24 j 10:34	0°Z06'33		max. Earth dist.	-4571 Jan 10 j 02:18	15°Z44'05	30.94710 AU
behind sun end	-4579 Dec 24 j 23:26	0°Z07'43		retrograde	-4571 Apr 26 j 10:31	18°Z16'09	
max. Earth dist.	-4579 Dec 25 j 16:48	0°Z09'22	31.00445 AU	min. Earth dist.	-4571 Jul 15 j 05:25	16°Z52'35	28.94191 AU
desc. node	-4578 Feb 21 j 05:00	2°Z03'54		opposition	-4571 Jul 16 j 05:21	16°Z50'55	0°-40'-47
retrograde	-4578 Apr 10 j 12:59	2°Z40'47		direct	-4571 Oct 01 j 21:08	15°Z28'05	
opposition	-4578 Jun 30 j 13:58	1°Z15'48	0°-1'-58				
min. Earth dist.	-4578 Jun 29 j 14:28	1°Z17'25	29.00110 AU	conjunction	-4570 Jan 11 j 13:41	17°Z55'32	0°-40'-36
	-4578 Aug 27 j 08:25	30°RM		minimum elong	-4570 Jan 11 j 13:41	17°Z55'32	0°40'50
direct	-4578 Sep 16 j 14:33	29°M53'05		max. Earth dist.	-4570 Jan 12 j 14:07	17°Z57'50	30.93591 AU
	-4578 Oct 06 j 14:14	0°Z		retrograde	-4570 Apr 28 j 21:54	20°Z29'59	
				opposition	-4570 Jul 18 j 17:41	19°Z04'41	0°-46'-9
conjunction	-4578 Dec 27 j 03:53	2°Z20'10	0°-4'-28	min. Earth dist.	-4570 Jul 17 j 18:41	19°Z06'17	28.93089 AU
minimum elong	-4578 Dec 27 j 03:52	2°Z20'10	0°04'41	direct	-4570 Oct 04 j 07:36	17°Z41'47	
behind sun begin	-4578 Dec 26 j 21:33	2°Z19'36					
behind sun end	-4578 Dec 27 j 10:11	2°Z20'44		conjunction	-4569 Jan 14 j 01:36	20°Z09'16	0°-45'-36
max. Earth dist.	-4578 Dec 28 j 03:23	2°Z22'23	30.99738 AU	minimum elong	-4569 Jan 14 j 01:35	20°Z09'16	0°45'51
retrograde	-4577 Apr 13 j 02:52	4°Z53'58		max. Earth dist.	-4569 Jan 15 j 02:57	20°Z11'40	30.92513 AU
min. Earth dist.	-4577 Jul 02 j 03:34	3°Z30'32	28.99435 AU	retrograde	-4569 May 01 j 11:00	22°Z43'46	
opposition	-4577 Jul 03 j 02:38	3°Z28'57	0°-7'-35	min. Earth dist.	-4569 Jul 20 j 05:37	21°Z20'06	28.92048 AU
direct	-4577 Sep 19 j 00:17	2°Z06'15		opposition	-4569 Jul 21 j 05:49	21°Z18'25	0°-51'-27
				direct	-4569 Oct 06 j 19:21	19°Z55'27	
conjunction	-4577 Dec 29 j 15:12	4°Z33'24	0°-9'-41	conjunction	-4568 Jan 16 j 13:36	22°Z23'01	0°-50'-31
minimum elong	-4577 Dec 29 j 15:12	4°Z33'24	0°09'53	minimum elong	-4568 Jan 16 j 13:36	22°Z23'00	0°50'45
behind sun begin	-4577 Dec 29 j 09:56	4°Z32'56		max. Earth dist.	-4568 Jan 17 j 14:23	22°Z25'21	30.91513 AU
behind sun end	-4577 Dec 29 j 20:28	4°Z33'53		retrograde	-4568 May 03 j 00:19	24°Z57'35	
max. Earth dist.	-4577 Dec 30 j 16:08	4°Z35'45	30.99074 AU	opposition	-4568 Jul 22 j 17:55	23°Z32'10	0°-56'-41
retrograde	-4576 Apr 14 j 15:58	7°Z07'19					

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Attention, astronomical year style is used: The year -4568 in astronomical counting style is the year 4569 BCE in historical counting style.

min. Earth dist.	-4568 Jul 21 j 18:25	23° \mathring{A} 33'48	28.91120 AU	min. Earth dist.	-4560 Aug 08 j 18:15	11° \mathring{B} 28'44	28.86390 AU
direct	-4568 Oct 08 j 04:50	22° \mathring{A} 09'09		direct	-4560 Oct 26 j 00:13	10° \mathring{B} 03'54	
conjunction	-4567 Jan 18 j 01:53	24° \mathring{A} 36'47	0°-55'-22	conjunction	-4559 Feb 05 j 07:50	12° \mathring{B} 32'19	-1°-30'-40
minimum elong	-4567 Jan 18 j 01:52	24° \mathring{A} 36'47	0°55'37	minimum elong	-4559 Feb 05 j 07:50	12° \mathring{B} 32'19	1°30'54
max. Earth dist.	-4567 Jan 19 j 03:55	24° \mathring{A} 39'15	30.90639 AU	max. Earth dist.	-4559 Feb 06 j 07:35	12° \mathring{B} 34'34	30.85928 AU
retrograde	-4567 May 05 j 13:37	27° \mathring{A} 11'25		retrograde	-4559 May 24 j 00:38	15° \mathring{B} 07'20	
min. Earth dist.	-4567 Jul 24 j 05:30	25° \mathring{A} 47'41	28.90309 AU	min. Earth dist.	-4559 Aug 11 j 07:30	13° \mathring{B} 43'24	28.85662 AU
opposition	-4567 Jul 25 j 05:54	25° \mathring{A} 45'59	-1°-1'-49	opposition	-4559 Aug 12 j 05:11	13° \mathring{B} 41'53	-1°-39'-5
direct	-4567 Oct 10 j 17:18	24° \mathring{A} 22'57		direct	-4559 Oct 28 j 09:48	12° \mathring{B} 18'34	
conjunction	-4566 Jan 20 j 13:59	26° \mathring{A} 50'40	-1°00'-8	conjunction	-4558 Feb 07 j 21:06	14° \mathring{B} 47'04	-1°-34'-32
minimum elong	-4566 Jan 20 j 13:58	26° \mathring{A} 50'40	1°00'22	minimum elong	-4558 Feb 07 j 21:05	14° \mathring{B} 47'04	1°34'46
max. Earth dist.	-4566 Jan 21 j 15:10	26° \mathring{A} 53'02	30.89891 AU	max. Earth dist.	-4558 Feb 08 j 21:28	14° \mathring{B} 49'22	30.85178 AU
retrograde	-4566 May 08 j 05:05	29° \mathring{A} 25'22		retrograde	-4558 May 26 j 13:01	17° \mathring{B} 22'02	
opposition	-4566 Jul 27 j 17:55	27° \mathring{A} 59'55	-1°-6'-53	opposition	-4558 Aug 14 j 16:48	15° \mathring{B} 56'33	-1°-43'-9
min. Earth dist.	-4566 Jul 26 j 17:37	28° \mathring{A} 01'37	28.89636 AU	min. Earth dist.	-4558 Aug 13 j 18:48	15° \mathring{B} 58'06	28.84911 AU
direct	-4566 Oct 13 j 04:32	26° \mathring{A} 36'52		direct	-4558 Oct 30 j 22:55	14° \mathring{B} 33'09	
conjunction	-4565 Jan 23 j 02:24	29° \mathring{A} 04'42	-1°-4'-49	conjunction	-4557 Feb 10 j 10:18	17° \mathring{B} 01'43	-1°-38'-15
minimum elong	-4565 Jan 23 j 02:23	29° \mathring{A} 04'42	1°05'04	minimum elong	-4557 Feb 10 j 10:18	17° \mathring{B} 01'42	1°38'30
max. Earth dist.	-4565 Jan 24 j 04:53	29° \mathring{A} 07'11	30.89269 AU	max. Earth dist.	-4557 Feb 11 j 09:17	17° \mathring{B} 03'52	30.84445 AU
	-4565 Feb 17 j 01:58	0° \mathring{B}		retrograde	-4557 May 29 j 03:15	19° \mathring{B} 36'39	
retrograde	-4565 May 10 j 17:25	1° \mathring{B} 39'28		min. Earth dist.	-4557 Aug 16 j 07:00	18° \mathring{B} 12'37	28.84222 AU
min. Earth dist.	-4565 Jul 29 j 05:34	0° \mathring{B} 15'44	28.89070 AU	opposition	-4557 Aug 17 j 04:24	18° \mathring{B} 11'07	-1°-47'-3
opposition	-4565 Jul 30 j 05:53	0° \mathring{B} 14'02	-1°-11'-50	direct	-4557 Nov 02 j 10:02	16° \mathring{B} 47'37	
	-4565 Aug 07 j 15:45	30° \mathring{R} \mathring{A}		conjunction	-4556 Feb 12 j 23:43	19° \mathring{B} 16'16	-1°-41'-49
direct	-4565 Oct 15 j 16:35	28° \mathring{A} 50'58		minimum elong	-4556 Feb 12 j 23:43	19° \mathring{B} 16'15	1°42'03
	-4565 Dec 19 j 22:17	0° \mathring{B}		max. Earth dist.	-4556 Feb 13 j 23:35	19° \mathring{B} 18'30	30.83785 AU
conjunction	-4564 Jan 25 j 14:49	1° \mathring{B} 18'54	-1°-9'-24	retrograde	-4556 May 30 j 15:24	21° \mathring{B} 51'09	
minimum elong	-4564 Jan 25 j 14:49	1° \mathring{B} 18'54	1°09'38	opposition	-4556 Aug 18 j 15:54	20° \mathring{B} 25'36	-1°-50'-47
max. Earth dist.	-4564 Jan 26 j 16:35	1° \mathring{B} 21'20	30.88752 AU	min. Earth dist.	-4556 Aug 17 j 18:47	20° \mathring{B} 27'05	28.83616 AU
retrograde	-4564 May 12 j 08:15	3° \mathring{B} 53'45		direct	-4556 Nov 03 j 22:18	19° \mathring{B} 02'01	
opposition	-4564 Jul 31 j 17:50	2° \mathring{B} 28'20	-1°-16'-41	conjunction	-4555 Feb 14 j 13:07	21° \mathring{B} 30'45	-1°-45'-15
min. Earth dist.	-4564 Jul 30 j 17:16	2° \mathring{B} 30'03	28.88590 AU	minimum elong	-4555 Feb 14 j 13:07	21° \mathring{B} 30'45	1°45'29
direct	-4564 Oct 17 j 03:35	1° \mathring{B} 05'16		max. Earth dist.	-4555 Feb 15 j 11:54	21° \mathring{B} 32'53	30.83240 AU
conjunction	-4563 Jan 27 j 03:35	3° \mathring{B} 33'19	-1°-13'-53	retrograde	-4555 Jun 02 j 06:17	24° \mathring{B} 05'37	
minimum elong	-4563 Jan 27 j 03:34	3° \mathring{B} 33'19	1°14'08	min. Earth dist.	-4555 Aug 20 j 06:00	22° \mathring{B} 41'33	28.83150 AU
max. Earth dist.	-4563 Jan 28 j 05:45	3° \mathring{B} 35'47	30.88272 AU	opposition	-4555 Aug 21 j 03:15	22° \mathring{B} 40'03	-1°-54'-21
retrograde	-4563 May 14 j 20:58	6° \mathring{B} 08'13		direct	-4555 Nov 06 j 09:54	21° \mathring{B} 16'24	
min. Earth dist.	-4563 Aug 02 j 06:07	4° \mathring{B} 44'29	28.88121 AU	conjunction	-4554 Feb 17 j 02:37	23° \mathring{B} 45'15	-1°-48'-30
opposition	-4563 Aug 03 j 05:41	4° \mathring{B} 42'50	-1°-21'-25	minimum elong	-4554 Feb 17 j 02:36	23° \mathring{B} 45'15	1°48'43
direct	-4563 Oct 19 j 15:01	3° \mathring{B} 19'46		max. Earth dist.	-4554 Feb 18 j 01:51	23° \mathring{B} 47'26	30.82832 AU
conjunction	-4562 Jan 29 j 16:29	5° \mathring{B} 47'55	-1°-18'-16	retrograde	-4554 Jun 04 j 19:08	26° \mathring{B} 20'05	
minimum elong	-4562 Jan 29 j 16:28	5° \mathring{B} 47'55	1°18'30	opposition	-4554 Aug 23 j 14:43	24° \mathring{B} 54'32	-1°-57'-45
max. Earth dist.	-4562 Jan 30 j 18:08	5° \mathring{B} 50'20	30.87798 AU	min. Earth dist.	-4554 Aug 22 j 18:17	24° \mathring{B} 55'59	28.82826 AU
retrograde	-4562 May 17 j 11:32	8° \mathring{B} 22'53		direct	-4554 Nov 08 j 21:49	23° \mathring{B} 30'52	
opposition	-4562 Aug 05 j 17:33	6° \mathring{B} 57'30	-1°-26'-2	conjunction	-4553 Feb 19 j 16:02	25° \mathring{B} 59'48	-1°-51'-36
min. Earth dist.	-4562 Aug 04 j 17:25	6° \mathring{B} 59'12	28.87628 AU	minimum elong	-4553 Feb 19 j 16:02	25° \mathring{B} 59'48	1°51'50
direct	-4562 Oct 22 j 02:10	5° \mathring{B} 34'25		max. Earth dist.	-4553 Feb 20 j 14:47	26° \mathring{B} 01'57	30.82590 AU
conjunction	-4561 Feb 01 j 05:21	8° \mathring{B} 02'40	-1°-22'-31	retrograde	-4553 Jun 07 j 09:31	28° \mathring{B} 34'39	
minimum elong	-4561 Feb 01 j 05:20	8° \mathring{B} 02'40	1°22'46	min. Earth dist.	-4553 Aug 25 j 04:58	27° \mathring{B} 10'37	28.82655 AU
max. Earth dist.	-4561 Feb 02 j 06:26	8° \mathring{B} 05'02	30.87256 AU	opposition	-4553 Aug 26 j 02:05	27° \mathring{B} 09'07	-2°00'-58
retrograde	-4561 May 19 j 22:39	10° \mathring{B} 37'41		direct	-4553 Nov 11 j 09:33	25° \mathring{B} 45'26	
min. Earth dist.	-4561 Aug 07 j 06:56	9° \mathring{B} 13'53	28.87055 AU	conjunction	-4552 Feb 22 j 05:44	28° \mathring{B} 14'30	-1°-54'-32
opposition	-4561 Aug 08 j 05:36	9° \mathring{B} 12'18	-1°-30'-31	minimum elong	-4552 Feb 22 j 05:44	28° \mathring{B} 14'30	1°54'44
direct	-4561 Oct 24 j 12:38	7° \mathring{B} 49'10		max. Earth dist.	-4552 Feb 23 j 04:05	28° \mathring{B} 16'36	30.82471 AU
conjunction	-4560 Feb 03 j 18:38	10° \mathring{B} 17'30	-1°-26'-39		-4552 Apr 13 j 16:59	0° \mathring{B}	
minimum elong	-4560 Feb 03 j 18:37	10° \mathring{B} 17'30	1°26'53	retrograde	-4552 Jun 08 j 21:23	0° \mathring{B} 49'20	
max. Earth dist.	-4560 Feb 04 j 19:45	10° \mathring{B} 19'52	30.86638 AU		-4552 Aug 05 j 13:11	30° \mathring{R} \mathring{B}	
retrograde	-4560 May 21 j 11:49	12° \mathring{B} 52'31		opposition	-4552 Aug 27 j 13:26	29° \mathring{B} 23'53	-2°-4'00
opposition	-4560 Aug 09 j 17:19	11° \mathring{B} 27'07	-1°-34'-53	min. Earth dist.	-4552 Aug 26 j 17:43	29° \mathring{B} 25'16	28.82600 AU

Attention, astronomical year style is used: The year -4552 in astronomical counting style is the year 4553 BCE in historical counting style.

direct	-4552 Nov 12 j 19:47	28°00'11		min. Earth dist.	-4544 Sep 13 j 16:33	17°27'14	28.81703 AU
	-4551 Feb 10 j 16:29	0°00'		direct	-4544 Nov 30 j 18:12	16°02'04	
conjunction	-4551 Feb 23 j 19:40	0°29'24	-1°-57'-17	conjunction	-4543 Mar 14 j 13:39	18°32'12	-2°-12'-35
minimum elong	-4551 Feb 23 j 19:39	0°29'24	1°57'30	minimum elong	-4543 Mar 14 j 13:40	18°32'12	2°12'46
max. Earth dist.	-4551 Feb 24 j 18:01	0°31'30	30.82462 AU	max. Earth dist.	-4543 Mar 15 j 05:02	18°33'38	30.81471 AU
retrograde	-4551 Jun 11 j 11:23	3°04'13		retrograde	-4543 Jun 29 j 20:02	21°06'29	
min. Earth dist.	-4551 Aug 29 j 04:36	1°40'16	28.82617 AU	opposition	-4543 Sep 16 j 18:11	19°41'18	-2°-22'-23
opposition	-4551 Aug 30 j 00:42	1°38'50	-2°-6'-51	min. Earth dist.	-4543 Sep 16 j 05:08	19°42'13	28.81615 AU
direct	-4551 Nov 15 j 07:04	0°15'08		direct	-4543 Dec 03 j 05:25	18°17'05	
conjunction	-4550 Feb 26 j 09:26	2°44'30	-1°-59'-51	conjunction	-4542 Mar 17 j 03:55	20°47'18	-2°-13'-37
minimum elong	-4550 Feb 26 j 09:26	2°44'30	2°00'04	minimum elong	-4542 Mar 17 j 03:55	20°47'18	2°13'47
max. Earth dist.	-4550 Feb 27 j 06:29	2°46'28	30.82483 AU	max. Earth dist.	-4542 Mar 17 j 19:05	20°48'43	30.81448 AU
retrograde	-4550 Jun 13 j 23:58	5°19'20		retrograde	-4542 Jul 02 j 10:14	23°21'28	
opposition	-4550 Sep 01 j 12:08	3°54'01	-2°-9'-30	opposition	-4542 Sep 19 j 05:03	21°56'18	-2°-23'-22
min. Earth dist.	-4550 Aug 31 j 17:37	3°55'20	28.82651 AU	min. Earth dist.	-4542 Sep 18 j 15:32	21°57'16	28.81655 AU
direct	-4550 Nov 17 j 16:13	2°30'18		direct	-4542 Dec 05 j 17:52	20°32'02	
conjunction	-4549 Feb 28 j 23:40	4°59'49	-2°-2'-15	conjunction	-4541 Mar 19 j 18:17	23°02'21	-2°-14'-26
minimum elong	-4549 Feb 28 j 23:40	4°59'49	2°02'28	minimum elong	-4541 Mar 19 j 18:17	23°02'21	2°14'36
max. Earth dist.	-4549 Mar 01 j 20:51	5°01'48	30.82496 AU	max. Earth dist.	-4541 Mar 20 j 08:13	23°03'39	30.81553 AU
retrograde	-4549 Jun 16 j 12:24	7°34'38		retrograde	-4541 Jul 04 j 21:37	25°36'25	
opposition	-4549 Sep 03 j 23:22	6°09'22	-2°-11'-58	opposition	-4541 Sep 21 j 15:57	24°11'18	-2°-24'-8
min. Earth dist.	-4549 Sep 03 j 05:02	6°10'40	28.82634 AU	min. Earth dist.	-4541 Sep 21 j 03:52	24°12'09	28.81842 AU
direct	-4549 Nov 20 j 04:56	4°45'37		direct	-4541 Dec 08 j 03:45	22°46'58	
conjunction	-4548 Mar 02 j 13:53	7°15'16	-2°-4'-27	conjunction	-4540 Mar 21 j 08:53	25°17'23	-2°-15'-3
minimum elong	-4548 Mar 02 j 13:53	7°15'16	2°04'39	minimum elong	-4540 Mar 21 j 08:53	25°17'23	2°15'12
max. Earth dist.	-4548 Mar 03 j 08:55	7°17'03	30.82439 AU	max. Earth dist.	-4540 Mar 21 j 23:02	25°18'43	30.81808 AU
retrograde	-4548 Jun 18 j 02:16	9°50'03		retrograde	-4540 Jul 06 j 09:24	27°51'21	
opposition	-4548 Sep 05 j 10:47	8°24'49	-2°-14'-13	opposition	-4540 Sep 23 j 02:47	26°26'18	-2°-24'-40
min. Earth dist.	-4548 Sep 04 j 17:38	8°26'02	28.82540 AU	min. Earth dist.	-4540 Sep 22 j 14:40	26°27'10	28.82149 AU
direct	-4548 Nov 21 j 15:50	7°01'00		direct	-4540 Dec 09 j 16:23	25°01'57	
conjunction	-4547 Mar 05 j 04:19	9°30'47	-2°-6'-28	conjunction	-4539 Mar 23 j 23:19	27°32'29	-2°-15'-27
minimum elong	-4547 Mar 05 j 04:19	9°30'47	2°06'40	minimum elong	-4539 Mar 23 j 23:19	27°32'29	2°15'37
max. Earth dist.	-4547 Mar 05 j 23:26	9°32'35	30.82288 AU	max. Earth dist.	-4539 Mar 24 j 11:37	27°33'38	30.82171 AU
retrograde	-4547 Jun 20 j 14:29	12°05'29		retrograde	-4539 Jun 19 j 10:05	0°00'	
opposition	-4547 Sep 07 j 21:58	10°40'18	-2°-16'-16	retrograde	-4539 Jul 08 j 22:20	0°06'22	
min. Earth dist.	-4547 Sep 07 j 05:43	10°41'27	28.82346 AU	retrograde	-4539 Jul 28 j 12:28	30°00'	
direct	-4547 Nov 24 j 03:52	9°16'25		opposition	-4539 Sep 25 j 13:36	28°41'24	-2°-25'00
conjunction	-4546 Mar 07 j 18:33	11°46'17	-2°-8'-18	min. Earth dist.	-4539 Sep 25 j 02:31	28°42'11	28.82562 AU
minimum elong	-4546 Mar 07 j 18:33	11°46'17	2°08'29	direct	-4539 Dec 12 j 02:18	27°17'00	
max. Earth dist.	-4546 Mar 08 j 11:49	11°47'54	30.82074 AU	conjunction	-4538 Mar 26 j 14:00	29°47'41	-2°-15'-39
retrograde	-4546 Jun 23 j 05:17	14°20'54		minimum elong	-4538 Mar 26 j 14:00	29°47'41	2°15'48
opposition	-4546 Sep 10 j 09:08	12°55'42	-2°-18'-7	max. Earth dist.	-4538 Mar 27 j 02:33	29°48'51	30.82611 AU
min. Earth dist.	-4546 Sep 09 j 17:22	12°56'49	28.82119 AU	retrograde	-4538 Apr 01 j 02:00	0°00'	
direct	-4546 Nov 26 j 16:18	11°31'44		retrograde	-4538 Jul 11 j 10:06	2°21'27	
conjunction	-4545 Mar 10 j 08:52	14°01'42	-2°-9'-55	opposition	-4538 Sep 28 j 00:25	0°56'35	-2°-25'-5
minimum elong	-4545 Mar 10 j 08:52	14°01'42	2°10'07	min. Earth dist.	-4538 Sep 27 j 14:15	0°57'18	28.83010 AU
max. Earth dist.	-4545 Mar 11 j 02:07	14°03'19	30.81830 AU	direct	-4538 Nov 03 j 06:46	30°00'	
retrograde	-4545 Apr 05 j 22:44	15°00'		direct	-4538 Dec 14 j 13:53	29°32'11	
retrograde	-4545 Jun 25 j 17:48	16°36'13		retrograde	-4537 Jan 24 j 09:21	0°00'	
opposition	-4545 Sep 12 j 20:17	15°11'01	-2°-19'-45	conjunction	-4537 Mar 29 j 04:36	2°02'58	-2°-15'-39
min. Earth dist.	-4545 Sep 12 j 05:55	15°12'02	28.81882 AU	minimum elong	-4537 Mar 29 j 04:36	2°02'58	2°15'46
direct	-4545 Sep 19 j 07:41	15°00'		max. Earth dist.	-4537 Mar 29 j 15:04	2°03'57	30.83065 AU
direct	-4545 Nov 29 j 05:24	13°46'58		retrograde	-4537 Jul 13 j 23:56	4°03'40	
	-4544 Feb 05 j 01:34	15°00'		opposition	-4537 Sep 30 j 11:16	3°11'51	-2°-24'-58
conjunction	-4544 Mar 11 j 23:15	16°17'00	-2°-11'-21	min. Earth dist.	-4537 Sep 30 j 01:48	3°12'32	28.83446 AU
minimum elong	-4544 Mar 11 j 23:15	16°17'00	2°11'32	direct	-4537 Dec 17 j 02:04	1°47'25	
max. Earth dist.	-4544 Mar 12 j 15:16	16°18'30	30.81620 AU	conjunction	-4536 Mar 30 j 19:33	4°18'21	-2°-15'-25
retrograde	-4544 Jun 27 j 07:44	18°51'24		minimum elong	-4536 Mar 30 j 19:33	4°18'21	2°15'32
opposition	-4544 Sep 14 j 07:08	17°26'12	-2°-21'-10	max. Earth dist.	-4536 Mar 31 j 05:38	4°19'17	30.83457 AU

Attention, astronomical year style is used: The year -4536 in astronomical counting style is the year 4537 BCE in historical counting style.

retrograde	-4536 Jul 15 j 11:51	6° K 51'55		direct	-4527 Jan 05 j 14:53	22° K 01'28	
opposition	-4536 Oct 01 j 22:06	5° K 27'11	-2°-24'-37				
min. Earth dist.	-4536 Oct 01 j 14:28	5° K 27'44	28.83793 AU	conjunction	-4527 Apr 21 j 07:27	24° K 33'07	-2°-4'-21
direct	-4536 Dec 18 j 14:49	4° K 02'43		minimum elong	-4527 Apr 21 j 07:28	24° K 33'07	2°04'24
				max. Earth dist.	-4527 Apr 21 j 08:43	24° K 33'14	30.86296 AU
conjunction	-4535 Apr 02 j 10:24	6° K 33'44	-2°-15'00	retrograde	-4527 Aug 05 j 00:30	27° K 05'20	
minimum elong	-4535 Apr 02 j 10:24	6° K 33'44	2°15'06	opposition	-4527 Oct 21 j 21:19	25° K 41'02	-2°-11'-49
max. Earth dist.	-4535 Apr 02 j 18:32	6° K 34'30	30.83768 AU	min. Earth dist.	-4527 Oct 21 j 21:07	25° K 41'03	28.86818 AU
retrograde	-4535 Jul 18 j 02:00	9° K 07'11		direct	-4526 Jan 08 j 02:52	24° K 16'03	
opposition	-4535 Oct 04 j 08:55	7° K 42'30	-2°-24'-3				
min. Earth dist.	-4535 Oct 04 j 01:27	7° K 43'02	28.84053 AU	conjunction	-4526 Apr 23 j 21:46	26° K 47'47	-2°-2'-9
direct	-4535 Dec 21 j 03:51	6° K 17'58		minimum elong	-4526 Apr 23 j 21:47	26° K 47'47	2°02'12
				max. Earth dist.	-4526 Apr 23 j 21:28	26° K 47'46	30.87095 AU
conjunction	-4534 Apr 05 j 01:04	8° K 49'04	-2°-14'-22	retrograde	-4526 Aug 07 j 13:56	29° K 19'53	
minimum elong	-4534 Apr 05 j 01:04	8° K 49'04	2°14'28	opposition	-4526 Oct 24 j 07:42	27° K 55'41	-2°-9'-21
max. Earth dist.	-4534 Apr 05 j 08:12	8° K 49'44	30.83979 AU	min. Earth dist.	-4526 Oct 24 j 07:26	27° K 55'42	28.87647 AU
retrograde	-4534 Jul 20 j 14:24	11° K 22'23		direct	-4525 Jan 10 j 15:11	26° K 30'41	
opposition	-4534 Oct 06 j 19:48	9° K 57'44	-2°-23'-16				
min. Earth dist.	-4534 Oct 06 j 14:20	9° K 58'07	28.84229 AU	conjunction	-4525 Apr 26 j 12:24	29° K 02'32	-1°-59'-45
direct	-4534 Dec 23 j 15:53	8° K 33'08		minimum elong	-4525 Apr 26 j 12:25	29° K 02'32	1°59'47
				max. Earth dist.	-4525 Apr 26 j 11:27	29° K 02'27	30.87942 AU
conjunction	-4533 Apr 07 j 15:54	11° K 04'19	-2°-13'-32		-4525 May 22 j 20:24	0° Y	
minimum elong	-4533 Apr 07 j 15:54	11° K 04'19	2°13'38	retrograde	-4525 Aug 10 j 02:03	1° Y 34'29	
max. Earth dist.	-4533 Apr 07 j 22:00	11° K 04'53	30.84141 AU	opposition	-4525 Oct 26 j 18:08	0° Y 10'24	-2°-6'-41
retrograde	-4533 Jul 23 j 04:18	13° K 37'27		min. Earth dist.	-4525 Oct 26 j 19:52	0° Y 10'16	28.88498 AU
opposition	-4533 Oct 09 j 06:20	12° K 12'50	-2°-22'-15		-4525 Nov 01 j 20:28	30° R K	
min. Earth dist.	-4533 Oct 09 j 00:57	12° K 13'13	28.84365 AU	direct	-4524 Jan 13 j 03:35	28° K 45'24	
direct	-4533 Dec 26 j 05:20	10° K 48'09			-4524 Mar 22 j 20:20	0° Y	
conjunction	-4532 Apr 09 j 06:39	13° K 19'24	-2°-12'-29	conjunction	-4524 Apr 28 j 03:05	1° Y 17'21	-1°-57'-10
minimum elong	-4532 Apr 09 j 06:39	13° K 19'24	2°12'36	minimum elong	-4524 Apr 28 j 03:06	1° Y 17'21	1°57'12
max. Earth dist.	-4532 Apr 09 j 11:10	13° K 19'50	30.84274 AU	max. Earth dist.	-4524 Apr 28 j 00:50	1° Y 17'08	30.88790 AU
retrograde	-4532 Jul 24 j 15:28	15° K 52'23		retrograde	-4524 Aug 11 j 15:33	3° Y 49'09	
opposition	-4532 Oct 10 j 17:01	14° K 27'47	-2°-21'-3	opposition	-4524 Oct 28 j 04:36	2° Y 25'08	-2°-3'-50
min. Earth dist.	-4532 Oct 10 j 13:24	14° K 28'03	28.84515 AU	min. Earth dist.	-4524 Oct 28 j 06:29	2° Y 25'00	28.89308 AU
direct	-4532 Dec 27 j 16:13	13° K 03'01		direct	-4523 Jan 14 j 17:43	1° Y 00'07	
conjunction	-4531 Apr 11 j 21:17	15° K 34'21	-2°-11'-15	conjunction	-4523 Apr 30 j 17:35	3° Y 32'09	-1°-54'-25
minimum elong	-4531 Apr 11 j 21:18	15° K 34'21	2°11'21	minimum elong	-4523 Apr 30 j 17:35	3° Y 32'09	1°54'25
max. Earth dist.	-4531 Apr 12 j 01:44	15° K 34'46	30.84449 AU	max. Earth dist.	-4523 Apr 30 j 13:45	3° Y 31'47	30.89561 AU
retrograde	-4531 Jul 27 j 02:57	18° K 07'09		retrograde	-4523 Aug 14 j 03:05	6° Y 03'47	
opposition	-4531 Oct 13 j 03:29	16° K 42'36	-2°-19'-37	opposition	-4523 Oct 30 j 15:12	4° Y 39'51	-2°00'-47
min. Earth dist.	-4531 Oct 13 j 00:00	16° K 42'51	28.84716 AU	min. Earth dist.	-4523 Oct 30 j 19:00	4° Y 39'35	28.90042 AU
direct	-4531 Dec 30 j 05:17	15° K 17'46		direct	-4522 Jan 17 j 05:06	3° Y 14'48	
conjunction	-4530 Apr 14 j 11:46	17° K 49'09	-2°-9'-50	conjunction	-4522 May 03 j 08:11	5° Y 46'52	-1°-51'-29
minimum elong	-4530 Apr 14 j 11:47	17° K 49'09	2°09'55	minimum elong	-4522 May 03 j 08:11	5° Y 46'52	1°51'30
max. Earth dist.	-4530 Apr 14 j 14:20	17° K 49'24	30.84705 AU	max. Earth dist.	-4522 May 03 j 03:46	5° Y 46'27	30.90259 AU
retrograde	-4530 Jul 29 j 15:09	20° K 21'48		retrograde	-4522 Aug 16 j 15:20	8° Y 18'19	
opposition	-4530 Oct 15 j 13:57	18° K 57'17	-2°-17'-59	opposition	-4522 Nov 02 j 01:34	6° Y 54'27	-1°-57'-34
min. Earth dist.	-4530 Oct 15 j 11:25	18° K 57'28	28.85039 AU	min. Earth dist.	-4522 Nov 02 j 05:54	6° Y 54'08	28.90683 AU
direct	-4529 Jan 01 j 15:11	17° K 32'23		direct	-4521 Jan 19 j 18:40	5° Y 29'21	
conjunction	-4529 Apr 17 j 02:22	20° K 03'51	-2°-8'-12	conjunction	-4521 May 05 j 22:37	8° Y 01'27	-1°-48'-24
minimum elong	-4529 Apr 17 j 02:23	20° K 03'51	2°08'15	minimum elong	-4521 May 05 j 22:38	8° Y 01'27	1°48'23
max. Earth dist.	-4529 Apr 17 j 05:15	20° K 04'07	30.85093 AU	max. Earth dist.	-4521 May 05 j 15:57	8° Y 00'50	30.90871 AU
retrograde	-4529 Aug 01 j 01:30	22° K 36'21		retrograde	-4521 Aug 19 j 03:26	10° Y 32'42	
opposition	-4529 Oct 18 j 00:25	21° K 11'53	-2°-16'-8	opposition	-4521 Nov 04 j 12:02	9° Y 08'52	-1°-54'-11
min. Earth dist.	-4529 Oct 17 j 22:34	21° K 12'01	28.85484 AU	min. Earth dist.	-4521 Nov 04 j 17:39	9° Y 08'28	28.91264 AU
direct	-4528 Jan 04 j 02:56	19° K 46'56		direct	-4520 Jan 22 j 05:40	7° Y 43'42	
conjunction	-4528 Apr 18 j 16:51	22° K 18'29	-2°-6'-22	conjunction	-4520 May 07 j 13:07	10° Y 15'49	-1°-45'-9
minimum elong	-4528 Apr 18 j 16:52	22° K 18'29	2°06'26	minimum elong	-4520 May 07 j 13:08	10° Y 15'49	1°45'08
max. Earth dist.	-4528 Apr 18 j 17:51	22° K 18'35	30.85623 AU	max. Earth dist.	-4520 May 07 j 06:21	10° Y 15'12	30.91430 AU
retrograde	-4528 Aug 02 j 13:38	24° K 50'50		retrograde	-4520 Aug 20 j 12:53	12° Y 46'52	
opposition	-4528 Oct 19 j 10:47	23° K 26'27	-2°-14'-5	opposition	-4520 Nov 05 j 22:23	11° Y 23'05	-1°-50'-37
min. Earth dist.	-4528 Oct 19 j 09:14	23° K 26'34	28.86088 AU	min. Earth dist.	-4520 Nov 06 j 05:03	11° Y 22'36	28.91799 AU

Attention, astronomical year style is used: The year -4519 in astronomical counting style is the year 4520 BCE in historical counting style.

direct	-4519 Jan 23 j 18:30	9° Υ 57'51		-4511 May 20 j 00:55	0° \mathcal{B}	
conjunction	-4519 May 10 j 03:18	12° Υ 29'58	-1°-41'-45	conjunction	-4511 May 28 j 18:24	0° \mathcal{B} 19'26 -1°-9'-34
minimum elong	-4519 May 10 j 03:19	12° Υ 29'58	1°41'43	minimum elong	-4511 May 28 j 18:25	0° \mathcal{B} 19'26 1°09'28
max. Earth dist.	-4519 May 09 j 18:26	12° Υ 29'09	30.91983 AU	max. Earth dist.	-4511 May 28 j 04:25	0° \mathcal{B} 18'08 30.99559 AU
retrograde	-4519 Aug 23 j 00:06	15° Υ 00'49		retrograde	-4511 Sep 09 j 18:19	2° \mathcal{B} 49'02
opposition	-4519 Nov 08 j 08:42	13° Υ 37'04	-1°-46'-54	opposition	-4511 Nov 25 j 19:29	1° \mathcal{B} 26'00 -1°-11'-57
min. Earth dist.	-4519 Nov 08 j 15:46	13° Υ 36'34	28.92368 AU	min. Earth dist.	-4511 Nov 26 j 08:40	1° \mathcal{B} 25'04 29.00141 AU
direct	-4518 Jan 26 j 06:06	12° Υ 11'45		direct	-4510 Feb 13 j 09:05	0° \mathcal{B} 00'42
conjunction	-4518 May 12 j 17:23	14° Υ 43'54	-1°-38'-12	conjunction	-4510 May 31 j 07:57	2° \mathcal{B} 33'14 -1°-5'00
minimum elong	-4518 May 12 j 17:24	14° Υ 43'54	1°38'10	minimum elong	-4510 May 31 j 07:58	2° \mathcal{B} 33'14 1°04'55
max. Earth dist.	-4518 May 12 j 08:48	14° Υ 43'06	30.92577 AU	max. Earth dist.	-4510 May 30 j 15:44	2° \mathcal{B} 31'43 31.00597 AU
retrograde	-4518 Aug 25 j 09:50	17° Υ 14'33		retrograde	-4510 Sep 12 j 05:34	5° \mathcal{B} 02'42
opposition	-4518 Nov 10 j 19:06	15° Υ 50'50	-1°-43'-2	opposition	-4510 Nov 28 j 05:58	3° \mathcal{B} 39'44 -1°-7'-2
min. Earth dist.	-4518 Nov 11 j 03:35	15° Υ 50'14	28.92992 AU	min. Earth dist.	-4510 Nov 28 j 19:41	3° \mathcal{B} 38'46 29.01124 AU
direct	-4517 Jan 28 j 17:50	14° Υ 25'28		direct	-4509 Feb 15 j 20:23	2° \mathcal{B} 14'25
conjunction	-4517 May 15 j 07:22	16° Υ 57'38	-1°-34'-30	conjunction	-4509 Jun 02 j 21:46	4° \mathcal{B} 46'59 -1°00'-21
minimum elong	-4517 May 15 j 07:23	16° Υ 57'38	1°34'27	minimum elong	-4509 Jun 02 j 21:46	4° \mathcal{B} 46'59 1°00'14
max. Earth dist.	-4517 May 14 j 21:12	16° Υ 56'41	30.93262 AU	max. Earth dist.	-4509 Jun 02 j 05:31	4° \mathcal{B} 45'28 31.01519 AU
retrograde	-4517 Aug 27 j 21:42	19° Υ 28'06		retrograde	-4509 Sep 14 j 15:13	7° \mathcal{B} 16'17
opposition	-4517 Nov 13 j 05:13	18° Υ 04'26	-1°-39'-1	opposition	-4509 Nov 30 j 16:30	5° \mathcal{B} 53'23 -1°-2'-1
min. Earth dist.	-4517 Nov 13 j 13:25	18° Υ 03'51	28.93729 AU	min. Earth dist.	-4509 Dec 01 j 07:58	5° \mathcal{B} 52'18 29.01984 AU
direct	-4516 Jan 31 j 06:14	16° Υ 39'01		direct	-4508 Feb 18 j 07:38	4° \mathcal{B} 28'03
conjunction	-4516 May 16 j 21:24	19° Υ 11'14	-1°-30'-40	conjunction	-4508 Jun 04 j 11:17	7° \mathcal{B} 00'36 0°-55'-37
minimum elong	-4516 May 16 j 21:25	19° Υ 11'14	1°30'38	minimum elong	-4508 Jun 04 j 11:17	7° \mathcal{B} 00'36 0°55'31
max. Earth dist.	-4516 May 16 j 11:04	19° Υ 10'16	30.94061 AU	max. Earth dist.	-4508 Jun 03 j 17:09	6° \mathcal{B} 58'55 31.02345 AU
retrograde	-4516 Aug 29 j 08:24	21° Υ 41'32		retrograde	-4508 Sep 16 j 02:09	9° \mathcal{B} 29'43
opposition	-4516 Nov 14 j 15:41	20° Υ 17'56	-1°-34'-50	opposition	-4508 Dec 02 j 02:58	8° \mathcal{B} 06'53 0°-56'-55
min. Earth dist.	-4516 Nov 15 j 01:21	20° Υ 17'15	28.94597 AU	min. Earth dist.	-4508 Dec 02 j 18:20	8° \mathcal{B} 05'48 29.02764 AU
direct	-4515 Feb 01 j 18:41	18° Υ 52'31		direct	-4507 Feb 19 j 20:06	6° \mathcal{B} 41'30
conjunction	-4515 May 19 j 11:07	21° Υ 24'45	-1°-26'-42	max. Earth dist.	-4507 Jun 06 j 06:16	9° \mathcal{B} 12'19 31.03090 AU
minimum elong	-4515 May 19 j 11:07	21° Υ 24'45	1°26'38	conjunction	-4507 Jun 07 j 00:36	9° \mathcal{B} 14'02 0°-50'-48
max. Earth dist.	-4515 May 19 j 00:00	21° Υ 23'43	30.95013 AU	minimum elong	-4507 Jun 07 j 00:36	9° \mathcal{B} 14'02 0°50'41
retrograde	-4515 Aug 31 j 20:43	23° Υ 54'54		retrograde	-4507 Sep 18 j 11:36	11° \mathcal{B} 42'59
opposition	-4515 Nov 17 j 01:55	22° Υ 31'24	-1°-30'-31	opposition	-4507 Dec 04 j 13:32	10° \mathcal{B} 20'10 0°-51'-44
min. Earth dist.	-4515 Nov 17 j 11:10	22° Υ 30'44	28.95605 AU	min. Earth dist.	-4507 Dec 05 j 06:36	10° \mathcal{B} 18'58 29.03491 AU
direct	-4514 Feb 04 j 08:33	21° Υ 05'59		direct	-4506 Feb 22 j 08:47	8° \mathcal{B} 54'44
conjunction	-4514 May 22 j 00:54	23° Υ 38'18	-1°-22'-35	conjunction	-4506 Jun 09 j 13:48	11° \mathcal{B} 27'14 0°-45'-55
minimum elong	-4514 May 22 j 00:55	23° Υ 38'18	1°22'33	minimum elong	-4506 Jun 09 j 13:48	11° \mathcal{B} 27'14 0°45'49
max. Earth dist.	-4514 May 21 j 12:57	23° Υ 37'11	30.96087 AU	max. Earth dist.	-4506 Jun 08 j 18:27	11° \mathcal{B} 25'26 31.03819 AU
retrograde	-4514 Sep 03 j 08:04	26° Υ 08'19		retrograde	-4506 Sep 20 j 22:44	13° \mathcal{B} 56'00
opposition	-4514 Nov 19 j 12:12	24° Υ 44'55	-1°-26'-4	opposition	-4506 Dec 06 j 23:48	12° \mathcal{B} 33'12 0°-46'-29
min. Earth dist.	-4514 Nov 19 j 22:57	24° Υ 44'09	28.96732 AU	min. Earth dist.	-4506 Dec 07 j 16:36	12° \mathcal{B} 32'02 29.04213 AU
direct	-4513 Feb 06 j 19:31	23° Υ 19'32		direct	-4505 Feb 24 j 22:28	11° \mathcal{B} 07'44
conjunction	-4513 May 24 j 14:48	25° Υ 51'55	-1°-18'-22	max. Earth dist.	-4505 Jun 11 j 06:52	13° \mathcal{B} 38'21 31.04554 AU
minimum elong	-4513 May 24 j 14:48	25° Υ 51'55	1°18'17	conjunction	-4505 Jun 12 j 02:56	13° \mathcal{B} 40'12 0°-40'-59
max. Earth dist.	-4513 May 24 j 02:38	25° Υ 50'47	30.97257 AU	minimum elong	-4505 Jun 12 j 02:56	13° \mathcal{B} 40'12 0°40'51
retrograde	-4513 Sep 05 j 20:25	28° Υ 21'47		-4505 Jul 19 j 17:25	15° \mathcal{B}	
opposition	-4513 Nov 21 j 22:32	26° Υ 58'32	-1°-21'-29	retrograde	-4505 Sep 23 j 09:26	16° \mathcal{B} 08'48
min. Earth dist.	-4513 Nov 22 j 09:34	26° Υ 57'45	28.97901 AU	-4505 Dec 01 j 02:32	15° $\mathcal{R}\mathcal{B}$	
direct	-4512 Feb 09 j 09:11	25° Υ 33'11		opposition	-4505 Dec 09 j 10:20	14° \mathcal{B} 46'02 0°-41'-10
conjunction	-4512 May 26 j 04:32	28° Υ 05'38	-1°-14'-1	min. Earth dist.	-4505 Dec 10 j 04:26	14° \mathcal{B} 44'46 29.04984 AU
minimum elong	-4512 May 26 j 04:33	28° Υ 05'38	1°13'57	direct	-4504 Feb 27 j 10:04	13° \mathcal{B} 20'31
max. Earth dist.	-4512 May 25 j 14:35	28° Υ 04'20	30.98428 AU	-4504 May 20 j 09:55	15° \mathcal{B}	
retrograde	-4512 Jul 23 j 03:24	0° \mathcal{B}		conjunction	-4504 Jun 13 j 15:51	15° \mathcal{B} 52'58 0°-35'-59
opposition	-4512 Sep 07 j 08:39	0° \mathcal{B} 35'23		minimum elong	-4504 Jun 13 j 15:51	15° \mathcal{B} 52'58 0°35'52
min. Earth dist.	-4512 Oct 24 j 08:27	30° $\mathcal{R}\Upsilon$		max. Earth dist.	-4504 Jun 12 j 19:55	15° \mathcal{B} 51'07 31.05365 AU
direct	-4512 Nov 23 j 08:57	29° Υ 12'14	-1°-16'-46	retrograde	-4504 Sep 24 j 20:52	18° \mathcal{B} 21'23
conjunction	-4512 Nov 23 j 21:04	29° Υ 11'23	28.99062 AU	opposition	-4504 Dec 10 j 20:48	16° \mathcal{B} 58'39 0°-35'-48
direct	-4511 Feb 10 j 20:11	27° Υ 46'55		min. Earth dist.	-4504 Dec 11 j 14:43	16° \mathcal{B} 57'24 29.05833 AU

Attention, astronomical year style is used: The year -4503 in astronomical counting style is the year 4504 BCE in historical counting style.

direct	-4503 Mar 01 j 00:49	15° 8 33'07		min. Earth dist.	-4497 Dec 27 j 20:28	2° II 24'19	29.13107 AU
max. Earth dist.	-4503 Jun 15 j 07:32	18° 8 03'35	31.06275 AU	direct	-4496 Mar 16 j 12:57	1° II 00'24	
conjunction	-4503 Jun 16 j 04:37	18° 8 05'32	0°-30'-56	conjunction	-4496 Jul 01 j 20:13	3° II 32'46	0°05'18
minimum elong	-4503 Jun 16 j 04:37	18° 8 05'32	0°30'48	minimum elong	-4496 Jul 01 j 20:13	3° II 32'46	0°05'28
retrograde	-4503 Sep 27 j 08:16	20° 8 33'49		behind sun begin	-4496 Jul 01 j 13:55	3° II 32'13	
opposition	-4503 Dec 13 j 07:17	19° 8 11'08	0°-30'-23	behind sun end	-4496 Jul 02 j 02:31	3° II 33'20	
min. Earth dist.	-4503 Dec 14 j 01:35	19° 8 09'51	29.06813 AU	max. Earth dist.	-4496 Jun 30 j 19:41	3° II 30'30	31.13461 AU
direct	-4502 Mar 03 j 12:41	17° 8 45'36		retrograde	-4496 Oct 12 j 08:01	6° II 00'16	
conjunction	-4502 Jun 18 j 17:20	20° 8 18'01	0°-25'-51	opposition	-4496 Dec 28 j 10:12	4° II 38'06	0°08'18
minimum elong	-4502 Jun 18 j 17:21	20° 8 18'01	0°25'43	min. Earth dist.	-4496 Dec 29 j 08:44	4° II 36'32	29.13854 AU
max. Earth dist.	-4502 Jun 17 j 20:56	20° 8 16'07	31.07312 AU	direct	-4495 Mar 19 j 00:30	3° II 12'42	
retrograde	-4502 Sep 29 j 17:39	22° 8 46'09		max. Earth dist.	-4495 Jul 03 j 07:52	5° II 42'45	31.14161 AU
opposition	-4502 Dec 15 j 17:50	21° 8 23'33	0°-24'-55	conjunction	-4495 Jul 04 j 08:25	5° II 45'02	0°10'27
min. Earth dist.	-4502 Dec 16 j 12:41	21° 8 22'14	29.07884 AU	minimum elong	-4495 Jul 04 j 08:24	5° II 45'02	0°10'39
direct	-4501 Mar 06 j 01:44	19° 8 58'03		behind sun begin	-4495 Jul 04 j 03:23	5° II 44'35	
max. Earth dist.	-4501 Jun 20 j 08:00	22° 8 28'26	31.08430 AU	behind sun end	-4495 Jul 04 j 13:26	5° II 45'29	
conjunction	-4501 Jun 21 j 05:57	22° 8 30'28	0°-20'-43	retrograde	-4495 Oct 14 j 19:06	8° II 12'24	
minimum elong	-4501 Jun 21 j 05:57	22° 8 30'28	0°20'34	opposition	-4495 Dec 30 j 20:56	6° II 50'15	0°13'50
retrograde	-4501 Oct 02 j 05:02	24° 8 58'28		min. Earth dist.	-4495 Dec 31 j 19:31	6° II 48'41	29.14505 AU
opposition	-4501 Dec 18 j 04:17	23° 8 35'58	0°-19'-25	direct	-4494 Mar 21 j 15:11	5° II 24'51	
min. Earth dist.	-4501 Dec 18 j 23:07	23° 8 34'39	29.09030 AU	conjunction	-4494 Jul 06 j 20:20	7° II 57'07	0°15'36
direct	-4500 Mar 07 j 13:09	22° 8 10'30		minimum elong	-4494 Jul 06 j 20:20	7° II 57'07	0°15'47
conjunction	-4500 Jun 22 j 18:39	24° 8 42'56	0°-15'-34	behind sun begin	-4494 Jul 06 j 19:28	7° II 57'03	
minimum elong	-4500 Jun 22 j 18:39	24° 8 42'56	0°15'25	behind sun end	-4494 Jul 06 j 21:13	7° II 57'12	
behind sun begin	-4500 Jun 22 j 17:04	24° 8 42'47		max. Earth dist.	-4494 Jul 05 j 18:37	7° II 54'44	31.14781 AU
behind sun end	-4500 Jun 22 j 20:15	24° 8 43'04		retrograde	-4494 Oct 17 j 06:17	10° II 24'22	
max. Earth dist.	-4500 Jun 21 j 21:21	24° 8 40'57	31.09582 AU	opposition	-4493 Jan 02 j 07:45	9° II 02'14	0°19'20
retrograde	-4500 Oct 03 j 14:33	27° 8 10'50		min. Earth dist.	-4493 Jan 03 j 06:47	9° II 00'38	29.15114 AU
opposition	-4500 Dec 19 j 15:03	25° 8 48'26	0°-13'-53	direct	-4493 Mar 24 j 03:28	7° II 36'48	
min. Earth dist.	-4500 Dec 20 j 11:14	25° 8 47'01	29.10173 AU	max. Earth dist.	-4493 Jul 08 j 07:16	10° II 06'42	31.15376 AU
direct	-4499 Mar 10 j 00:26	24° 8 23'00		conjunction	-4493 Jul 09 j 08:14	10° II 09'01	0°20'43
max. Earth dist.	-4499 Jun 24 j 08:15	26° 8 53'18	31.10708 AU	minimum elong	-4493 Jul 09 j 08:14	10° II 09'01	0°20'56
conjunction	-4499 Jun 25 j 06:58	26° 8 55'25	0°-10'-24	retrograde	-4493 Oct 19 j 15:18	12° II 36'09	
minimum elong	-4499 Jun 25 j 06:58	26° 8 55'25	0°10'13	opposition	-4492 Jan 04 j 18:36	11° II 14'01	0°24'47
behind sun begin	-4499 Jun 25 j 01:47	26° 8 54'57		min. Earth dist.	-4492 Jan 05 j 18:05	11° II 12'24	29.15711 AU
behind sun end	-4499 Jun 25 j 12:09	26° 8 55'53		direct	-4492 Mar 25 j 17:00	9° II 48'35	
retrograde	-4499 Oct 06 j 01:13	29° 8 23'14		conjunction	-4492 Jul 10 j 19:49	12° II 20'44	0°25'48
opposition	-4499 Dec 22 j 01:43	28° 8 00'54	0°-8'-20	minimum elong	-4492 Jul 10 j 19:49	12° II 20'44	0°26'00
min. Earth dist.	-4499 Dec 22 j 21:32	27° 8 59'31	29.11264 AU	max. Earth dist.	-4492 Jul 09 j 17:42	12° II 18'18	31.15998 AU
direct	-4498 Mar 12 j 12:33	26° 8 35'30		retrograde	-4492 Oct 21 j 02:27	14° II 47'45	
conjunction	-4498 Jun 27 j 19:31	29° 8 07'55	0°-5'-13	opposition	-4491 Jan 06 j 05:28	13° II 25'38	0°30'13
minimum elong	-4498 Jun 27 j 19:32	29° 8 07'55	0°05'04	min. Earth dist.	-4491 Jan 07 j 04:22	13° II 24'03	29.16380 AU
behind sun begin	-4498 Jun 27 j 13:10	29° 8 07'21		direct	-4491 Mar 28 j 05:17	12° II 00'11	
behind sun end	-4498 Jun 28 j 01:53	29° 8 08'29		max. Earth dist.	-4491 Jul 12 j 06:23	14° II 29'58	31.16703 AU
max. Earth dist.	-4498 Jun 26 j 20:46	29° 8 05'49	31.11742 AU	conjunction	-4491 Jul 13 j 07:16	14° II 32'17	0°30'51
retrograde	-4498 Jul 21 j 13:58	0° II		minimum elong	-4491 Jul 13 j 07:16	14° II 32'17	0°31'04
opposition	-4498 Oct 08 j 10:30	1° II 35'38		retrograde	-4491 Oct 23 j 11:30	16° II 59'12	
min. Earth dist.	-4498 Dec 24 j 12:28	0° II 13'22	0°-2'-47	opposition	-4490 Jan 08 j 16:27	15° II 37'08	0°35'35
direct	-4497 Jan 01 j 12:59	30° R 8		min. Earth dist.	-4490 Jan 09 j 16:07	15° II 35'29	29.17140 AU
asc. node	-4497 May 23 j 09:56	0° II		direct	-4490 Mar 30 j 17:18	14° II 11'41	
max. Earth dist.	-4497 Jun 29 j 08:08	1° II 18'11	31.12670 AU	conjunction	-4490 Jul 15 j 18:37	16° II 43'44	0°35'51
conjunction	-4497 Jun 30 j 07:58	1° II 20'23	0°00'02	minimum elong	-4490 Jul 15 j 18:36	16° II 43'44	0°36'03
minimum elong	-4497 Jun 30 j 07:58	1° II 20'23	0°00'14	max. Earth dist.	-4490 Jul 14 j 16:59	16° II 41'21	31.17524 AU
behind sun begin	-4497 Jun 30 j 01:30	1° II 19'49		retrograde	-4490 Oct 25 j 21:05	19° II 10'34	
behind sun end	-4497 Jun 30 j 14:26	1° II 20'58		opposition	-4489 Jan 11 j 03:09	17° II 48'33	0°40'54
retrograde	-4497 Oct 10 j 21:28	3° II 47'59		min. Earth dist.	-4489 Jan 12 j 01:45	17° II 46'59	29.18016 AU
opposition	-4497 Dec 26 j 23:16	2° II 25'47	0°02'46	direct	-4489 Apr 02 j 05:13	16° II 23'08	
				max. Earth dist.	-4489 Jul 17 j 05:09	18° II 52'50	31.18444 AU
				conjunction	-4489 Jul 18 j 06:02	18° II 55'10	0°40'48

Planetary Phenomena of Neptune from -4900 through -4400 (UT), Astrodienst AG 7-Dez-2017 14:35, page 27

Attention, astronomical year style is used: The year -4489 in astronomical counting style is the year 4490 BCE in historical counting style.

minimum elong	-4489 Jul 18 j 06:02	18°II55'09	0°41'01	conjunction	-4481 Aug 04 j 21:44	6°☾26'10	1°17'39
retrograde	-4489 Oct 28 j 05:52	21°II21'56		minimum elong	-4481 Aug 04 j 21:44	6°☾26'10	1°17'53
opposition	-4488 Jan 13 j 14:15	19°II59'58	0°46'10	max. Earth dist.	-4481 Aug 03 j 19:55	6°☾23'45	31.24543 AU
min. Earth dist.	-4488 Jan 14 j 13:47	19°II58'21	29.18984 AU	retrograde	-4481 Nov 14 j 17:06	8°☾52'32	
direct	-4488 Apr 03 j 15:44	18°II34'37		opposition	-4480 Jan 31 j 08:27	7°☾30'45	1°25'10
				min. Earth dist.	-4480 Feb 01 j 07:50	7°☾29'09	29.24835 AU
conjunction	-4488 Jul 19 j 17:08	21°II06'36	0°45'42	direct	-4480 Apr 21 j 19:12	6°☾05'35	
minimum elong	-4488 Jul 19 j 17:08	21°II06'36	0°45'54	max. Earth dist.	-4480 Aug 05 j 07:14	8°☾34'40	31.24955 AU
max. Earth dist.	-4488 Jul 18 j 16:05	21°II04'16	31.19442 AU				
retrograde	-4488 Oct 29 j 16:19	23°II33'20		conjunction	-4480 Aug 06 j 08:07	8°☾37'00	1°21'49
opposition	-4487 Jan 15 j 01:16	22°II11'26	0°51'21	minimum elong	-4480 Aug 06 j 08:07	8°☾37'00	1°22'02
min. Earth dist.	-4487 Jan 15 j 23:55	22°II09'53	29.19990 AU	retrograde	-4480 Nov 16 j 01:44	11°☾03'20	
direct	-4487 Apr 06 j 03:07	20°II46'08		opposition	-4479 Feb 01 j 20:03	9°☾41'31	1°29'32
max. Earth dist.	-4487 Jul 21 j 03:08	23°II15'44	31.20439 AU	min. Earth dist.	-4479 Feb 02 j 20:04	9°☾39'52	29.25273 AU
				direct	-4479 Apr 24 j 06:21	8°☾16'21	
conjunction	-4487 Jul 22 j 04:19	23°II18'05	0°50'31	conjunction	-4479 Aug 08 j 18:24	10°☾47'39	1°25'51
minimum elong	-4487 Jul 22 j 04:19	23°II18'05	0°50'45	minimum elong	-4479 Aug 08 j 18:23	10°☾47'39	1°26'04
retrograde	-4487 Nov 01 j 02:46	25°II44'48		max. Earth dist.	-4479 Aug 07 j 17:47	10°☾45'21	31.25418 AU
opposition	-4486 Jan 17 j 12:21	24°II22'57	0°56'28	retrograde	-4479 Nov 18 j 11:30	13°☾13'57	
min. Earth dist.	-4486 Jan 18 j 11:56	24°II21'20	29.20987 AU	opposition	-4478 Feb 04 j 07:22	11°☾52'08	1°33'47
direct	-4486 Apr 08 j 14:08	22°II57'43		min. Earth dist.	-4478 Feb 05 j 06:02	11°☾50'35	29.25773 AU
				direct	-4478 Apr 26 j 18:02	10°☾27'00	
conjunction	-4486 Jul 24 j 15:29	25°II29'37	0°55'16	max. Earth dist.	-4478 Aug 10 j 04:20	12°☾55'57	31.25955 AU
minimum elong	-4486 Jul 24 j 15:29	25°II29'37	0°55'29				
max. Earth dist.	-4486 Jul 23 j 14:41	25°II27'18	31.21398 AU	conjunction	-4478 Aug 11 j 04:39	12°☾58'13	1°29'46
retrograde	-4486 Nov 03 j 13:36	27°II56'17		minimum elong	-4478 Aug 11 j 04:38	12°☾58'13	1°29'58
opposition	-4485 Jan 19 j 23:35	26°II34'29	1°01'31	retrograde	-4478 Nov 20 j 21:39	15°☾24'31	
min. Earth dist.	-4485 Jan 20 j 22:59	26°II32'52	29.21895 AU	opposition	-4477 Feb 06 j 18:58	14°☾02'43	1°37'54
direct	-4485 Apr 11 j 03:50	25°II09'17		min. Earth dist.	-4477 Feb 07 j 17:50	14°☾01'09	29.26374 AU
max. Earth dist.	-4485 Jul 26 j 00:43	27°II38'44	31.22246 AU	direct	-4477 Apr 29 j 04:44	12°☾37'38	
conjunction	-4485 Jul 27 j 02:30	27°II41'08	0°59'57	conjunction	-4477 Aug 13 j 14:47	15°☾08'47	1°33'33
minimum elong	-4485 Jul 27 j 02:30	27°II41'08	1°00'10	minimum elong	-4477 Aug 13 j 14:46	15°☾08'47	1°33'46
	-4485 Oct 15 j 20:01	0°☾		max. Earth dist.	-4477 Aug 12 j 15:41	15°☾06'37	31.26599 AU
retrograde	-4485 Nov 06 j 00:57	0°☾07'46		retrograde	-4477 Nov 23 j 08:02	17°☾35'06	
	-4485 Nov 27 j 11:47	30°☾II		opposition	-4476 Feb 09 j 06:36	16°☾13'19	1°41'52
opposition	-4484 Jan 22 j 10:53	28°II45'59	1°06'27	min. Earth dist.	-4476 Feb 10 j 04:33	16°☾11'49	29.27055 AU
min. Earth dist.	-4484 Jan 23 j 10:31	28°II44'22	29.22702 AU	direct	-4476 Apr 30 j 17:16	14°☾48'18	
direct	-4484 Apr 12 j 15:16	27°II20'48		max. Earth dist.	-4476 Aug 14 j 01:27	17°☾17'13	31.27316 AU
conjunction	-4484 Jul 28 j 13:36	29°II52'36	1°04'31	conjunction	-4476 Aug 15 j 00:49	17°☾19'24	1°37'12
minimum elong	-4484 Jul 28 j 13:35	29°II52'36	1°04'44	minimum elong	-4476 Aug 15 j 00:49	17°☾19'24	1°37'24
max. Earth dist.	-4484 Jul 27 j 12:38	29°II50'16	31.22984 AU	retrograde	-4476 Nov 24 j 19:42	19°☾45'46	
	-4484 Jul 31 j 20:42	0°☾		opposition	-4475 Feb 10 j 18:15	18°☾24'01	1°45'42
retrograde	-4484 Nov 07 j 10:39	2°☾19'10		min. Earth dist.	-4475 Feb 11 j 15:44	18°☾22'33	29.27810 AU
opposition	-4483 Jan 23 j 22:22	0°☾57'24	1°11'18	direct	-4475 May 03 j 03:20	16°☾59'06	
min. Earth dist.	-4483 Jan 24 j 22:24	0°☾55'45	29.23377 AU				
	-4483 Mar 03 j 04:15	30°☾II		conjunction	-4475 Aug 17 j 10:51	19°☾30'09	1°40'42
direct	-4483 Apr 15 j 04:49	29°II32'15		minimum elong	-4475 Aug 17 j 10:50	19°☾30'09	1°40'55
	-4483 May 27 j 04:39	0°☾		max. Earth dist.	-4475 Aug 16 j 12:58	19°☾28'06	31.28068 AU
max. Earth dist.	-4483 Jul 29 j 22:07	2°☾01'31	31.23599 AU	retrograde	-4475 Nov 27 j 05:49	21°☾56'34	
				opposition	-4474 Feb 13 j 06:03	20°☾34'52	1°49'22
conjunction	-4483 Jul 31 j 00:18	2°☾03'57	1°09'00	min. Earth dist.	-4474 Feb 14 j 03:34	20°☾33'24	29.28548 AU
minimum elong	-4483 Jul 31 j 00:18	2°☾03'57	1°09'14	direct	-4474 May 05 j 16:16	19°☾10'02	
retrograde	-4483 Nov 09 j 22:21	4°☾30'27					
opposition	-4482 Jan 26 j 09:40	3°☾08'42	1°16'02	conjunction	-4474 Aug 19 j 20:47	21°☾41'02	1°44'04
min. Earth dist.	-4482 Jan 27 j 09:15	3°☾07'05	29.23943 AU	minimum elong	-4474 Aug 19 j 20:46	21°☾41'02	1°44'16
direct	-4482 Apr 17 j 17:48	1°☾43'32		max. Earth dist.	-4474 Aug 18 j 22:07	21°☾38'55	31.28780 AU
max. Earth dist.	-4482 Aug 01 j 09:59	4°☾12'48	31.24103 AU	retrograde	-4474 Nov 29 j 18:22	24°☾07'29	
				opposition	-4473 Feb 15 j 17:47	22°☾45'50	1°52'53
conjunction	-4482 Aug 02 j 11:10	4°☾15'09	1°13'23	min. Earth dist.	-4473 Feb 16 j 14:28	22°☾44'25	29.29231 AU
minimum elong	-4482 Aug 02 j 11:10	4°☾15'09	1°13'36	direct	-4473 May 08 j 04:50	21°☾21'05	
retrograde	-4482 Nov 12 j 07:19	6°☾41'35		max. Earth dist.	-4473 Aug 21 j 09:30	23°☾50'02	31.29401 AU
opposition	-4481 Jan 28 j 21:03	5°☾19'49	1°20'39				
min. Earth dist.	-4481 Jan 29 j 21:36	5°☾18'08	29.24409 AU	conjunction	-4473 Aug 22 j 06:53	23°☾52'03	1°47'17
direct	-4481 Apr 20 j 06:41	3°☾54'40		minimum elong	-4473 Aug 22 j 06:53	23°☾52'03	1°47'29

Attention, astronomical year style is used: The year -4473 in astronomical counting style is the year 4474 BCE in historical counting style.

retrograde	-4473 Dec 02 j 04:21	26° \mathring{U} 18'32		retrograde	-4465 Dec 19 j 14:41	13° \mathring{U} 44'43	
opposition	-4472 Feb 18 j 05:55	24° \mathring{U} 56'54	1°56'14	opposition	-4464 Mar 07 j 06:57	12° \mathring{U} 22'44	2°16'42
min. Earth dist.	-4472 Feb 19 j 03:18	24° \mathring{U} 55'27	29.29800 AU	min. Earth dist.	-4464 Mar 07 j 23:09	12° \mathring{U} 21'39	29.30843 AU
direct	-4472 May 09 j 17:21	23° \mathring{U} 32'13		direct	-4464 May 27 j 15:44	10° \mathring{U} 58'16	
conjunction	-4472 Aug 23 j 16:41	26° \mathring{U} 03'06	1°50'20	conjunction	-4464 Sep 09 j 21:01	13° \mathring{U} 28'14	2°08'48
minimum elong	-4472 Aug 23 j 16:41	26° \mathring{U} 03'06	1°50'32	minimum elong	-4464 Sep 09 j 21:01	13° \mathring{U} 28'14	2°08'57
max. Earth dist.	-4472 Aug 22 j 18:51	26° \mathring{U} 01'03	31.29904 AU	max. Earth dist.	-4464 Sep 09 j 04:46	13° \mathring{U} 26'42	31.30771 AU
retrograde	-4472 Dec 03 j 14:35	28° \mathring{U} 29'38			-4464 Oct 23 j 15:36	15° \mathring{U}	
opposition	-4471 Feb 19 j 17:55	27° \mathring{U} 08'00	1°59'25	retrograde	-4464 Dec 21 j 00:40	15° \mathring{U} 55'04	
min. Earth dist.	-4471 Feb 20 j 14:04	27° \mathring{U} 06'38	29.30234 AU		-4463 Feb 20 j 21:34	15° \mathring{R} \mathring{U}	
direct	-4471 May 12 j 05:55	25° \mathring{U} 43'23		opposition	-4463 Mar 09 j 19:21	14° \mathring{U} 33'05	2°18'24
max. Earth dist.	-4471 Aug 25 j 05:29	28° \mathring{U} 12'11	31.30248 AU	min. Earth dist.	-4463 Mar 10 j 11:38	14° \mathring{U} 31'58	29.31046 AU
				direct	-4463 May 30 j 03:29	13° \mathring{U} 08'41	
conjunction	-4471 Aug 26 j 02:41	28° \mathring{U} 14'11	1°53'15		-4463 Aug 26 j 00:07	15° \mathring{U}	
minimum elong	-4471 Aug 26 j 02:41	28° \mathring{U} 14'11	1°53'26				
	-4471 Oct 17 j 09:02	0° \mathring{U}		conjunction	-4463 Sep 12 j 06:12	15° \mathring{U} 38'34	2°10'18
retrograde	-4471 Dec 05 j 23:53	0° \mathring{U} 40'44		minimum elong	-4463 Sep 12 j 06:12	15° \mathring{U} 38'34	2°10'28
	-4470 Jan 26 j 22:20	30° \mathring{R} \mathring{U}		max. Earth dist.	-4463 Sep 11 j 14:11	15° \mathring{U} 37'03	31.31001 AU
opposition	-4470 Feb 22 j 05:56	29° \mathring{U} 19'05	2°02'26	retrograde	-4463 Dec 23 j 11:39	18° \mathring{U} 05'29	
min. Earth dist.	-4470 Feb 23 j 02:55	29° \mathring{U} 17'40	29.30515 AU	opposition	-4462 Mar 12 j 07:28	16° \mathring{U} 43'30	2°19'55
direct	-4470 May 14 j 17:30	27° \mathring{U} 54'30		min. Earth dist.	-4462 Mar 12 j 22:01	16° \mathring{U} 42'31	29.31279 AU
	-4470 Aug 17 j 07:27	0° \mathring{U}		direct	-4462 Jun 01 j 15:50	15° \mathring{U} 19'10	
conjunction	-4470 Aug 28 j 12:32	0° \mathring{U} 25'11	1°55'59	conjunction	-4462 Sep 14 j 15:29	17° \mathring{U} 49'00	2°11'37
minimum elong	-4470 Aug 28 j 12:32	0° \mathring{U} 25'11	1°56'10	minimum elong	-4462 Sep 14 j 15:29	17° \mathring{U} 49'00	2°11'46
max. Earth dist.	-4470 Aug 27 j 15:27	0° \mathring{U} 23'12	31.30456 AU	max. Earth dist.	-4462 Sep 14 j 00:30	17° \mathring{U} 47'35	31.31218 AU
retrograde	-4470 Dec 08 j 09:50	2° \mathring{U} 51'46		retrograde	-4462 Dec 25 j 22:03	20° \mathring{U} 16'01	
opposition	-4469 Feb 24 j 18:00	1° \mathring{U} 30'05	2°05'16	opposition	-4461 Mar 14 j 20:03	18° \mathring{U} 54'02	2°21'13
min. Earth dist.	-4469 Feb 25 j 13:48	1° \mathring{U} 28'44	29.30648 AU	min. Earth dist.	-4461 Mar 15 j 10:56	18° \mathring{U} 53'01	29.31485 AU
direct	-4469 May 17 j 05:58	0° \mathring{U} 05'30		direct	-4461 Jun 04 j 03:27	17° \mathring{U} 29'48	
				max. Earth dist.	-4461 Sep 16 j 10:24	19° \mathring{U} 58'12	31.31393 AU
conjunction	-4469 Aug 30 j 22:12	2° \mathring{U} 36'04	1°58'33	conjunction	-4461 Sep 17 j 00:37	19° \mathring{U} 59'33	2°12'45
minimum elong	-4469 Aug 30 j 22:12	2° \mathring{U} 36'04	1°58'45	minimum elong	-4461 Sep 17 j 00:37	19° \mathring{U} 59'33	2°12'54
max. Earth dist.	-4469 Aug 30 j 01:12	2° \mathring{U} 34'06	31.30524 AU	retrograde	-4461 Dec 28 j 08:29	22° \mathring{U} 26'41	
retrograde	-4469 Dec 10 j 19:34	5° \mathring{U} 02'40		opposition	-4460 Mar 16 j 08:36	21° \mathring{U} 04'41	2°22'19
opposition	-4468 Feb 27 j 06:14	3° \mathring{U} 40'55	2°07'56	min. Earth dist.	-4460 Mar 16 j 21:56	21° \mathring{U} 03'47	29.31610 AU
min. Earth dist.	-4468 Feb 28 j 02:20	3° \mathring{U} 39'34	29.30682 AU	direct	-4460 Jun 05 j 15:56	19° \mathring{U} 40'32	
direct	-4468 May 18 j 16:55	2° \mathring{U} 16'21					
conjunction	-4468 Sep 01 j 07:49	4° \mathring{U} 46'47	2°00'57	conjunction	-4460 Sep 18 j 09:52	22° \mathring{U} 10'12	2°13'41
minimum elong	-4468 Sep 01 j 07:48	4° \mathring{U} 46'47	2°01'08	minimum elong	-4460 Sep 18 j 09:52	22° \mathring{U} 10'12	2°13'49
max. Earth dist.	-4468 Aug 31 j 12:06	4° \mathring{U} 44'56	31.30523 AU	max. Earth dist.	-4460 Sep 17 j 19:46	22° \mathring{U} 08'52	31.31459 AU
retrograde	-4468 Dec 12 j 05:01	7° \mathring{U} 13'24		retrograde	-4460 Dec 29 j 19:00	24° \mathring{U} 37'28	
opposition	-4467 Feb 28 j 18:20	5° \mathring{U} 51'35	2°10'24	opposition	-4459 Mar 18 j 21:13	23° \mathring{U} 15'26	2°23'14
min. Earth dist.	-4467 Mar 01 j 13:30	5° \mathring{U} 50'17	29.30660 AU	min. Earth dist.	-4459 Mar 19 j 10:44	23° \mathring{U} 14'32	29.31628 AU
direct	-4467 May 21 j 05:00	4° \mathring{U} 27'01		direct	-4459 Jun 08 j 02:11	21° \mathring{U} 51'21	
conjunction	-4467 Sep 03 j 17:07	6° \mathring{U} 57'19	2°03'11	conjunction	-4459 Sep 20 j 19:10	24° \mathring{U} 20'56	2°14'26
minimum elong	-4467 Sep 03 j 17:07	6° \mathring{U} 57'19	2°03'22	minimum elong	-4459 Sep 20 j 19:10	24° \mathring{U} 20'56	2°14'34
max. Earth dist.	-4467 Sep 02 j 21:16	6° \mathring{U} 55'27	31.30496 AU	max. Earth dist.	-4459 Sep 20 j 06:22	24° \mathring{U} 19'44	31.31404 AU
retrograde	-4467 Dec 14 j 16:18	9° \mathring{U} 23'58		retrograde	-4458 Jan 01 j 04:52	26° \mathring{U} 48'18	
opposition	-4466 Mar 03 j 06:30	8° \mathring{U} 02'04	2°12'42	opposition	-4458 Mar 21 j 09:51	25° \mathring{U} 26'15	2°23'55
min. Earth dist.	-4466 Mar 04 j 00:53	8° \mathring{U} 00'50	29.30657 AU	min. Earth dist.	-4458 Mar 21 j 22:31	25° \mathring{U} 25'24	29.31488 AU
direct	-4466 May 23 j 14:57	6° \mathring{U} 37'31		direct	-4458 Jun 10 j 14:00	24° \mathring{U} 02'13	
max. Earth dist.	-4466 Sep 05 j 08:33	9° \mathring{U} 05'59	31.30507 AU				
conjunction	-4466 Sep 06 j 02:33	9° \mathring{U} 07'41	2°05'14	conjunction	-4458 Sep 23 j 04:18	26° \mathring{U} 31'42	2°14'59
minimum elong	-4466 Sep 06 j 02:33	9° \mathring{U} 07'41	2°05'24	minimum elong	-4458 Sep 23 j 04:18	26° \mathring{U} 31'42	2°15'07
retrograde	-4466 Dec 17 j 02:06	11° \mathring{U} 34'22		max. Earth dist.	-4458 Sep 22 j 15:03	26° \mathring{U} 30'27	31.31188 AU
opposition	-4465 Mar 05 j 18:41	10° \mathring{U} 12'26	2°14'48	retrograde	-4457 Jan 03 j 16:44	28° \mathring{U} 59'11	
min. Earth dist.	-4465 Mar 06 j 12:32	10° \mathring{U} 11'14	29.30701 AU	opposition	-4457 Mar 23 j 22:32	27° \mathring{U} 37'04	2°24'25
direct	-4465 May 26 j 04:04	8° \mathring{U} 47'54		min. Earth dist.	-4457 Mar 24 j 10:36	27° \mathring{U} 36'15	29.31206 AU
				direct	-4457 Jun 12 j 23:43	26° \mathring{U} 13'04	
conjunction	-4465 Sep 08 j 11:47	11° \mathring{U} 17'58	2°07'06	conjunction	-4457 Sep 25 j 13:35	28° \mathring{U} 42'27	2°15'21
minimum elong	-4465 Sep 08 j 11:47	11° \mathring{U} 17'58	2°07'17	minimum elong	-4457 Sep 25 j 13:35	28° \mathring{U} 42'27	2°15'29
max. Earth dist.	-4465 Sep 07 j 17:38	11° \mathring{U} 16'16	31.30598 AU	max. Earth dist.	-4457 Sep 25 j 01:58	28° \mathring{U} 41'21	31.30836 AU

Attention, astronomical year style is used: The year -4457 in astronomical counting style is the year 4458 BCE in historical counting style.

	-4457 Oct 31 j 13:16	0° $\mathring{\text{M}}$		retrograde	-4448 Jan 23 j 19:17	18° $\mathring{\text{M}}$ 35'11	
retrograde	-4456 Jan 06 j 03:05	1° $\mathring{\text{M}}$ 10'02		opposition	-4448 Apr 12 j 17:10	17° $\mathring{\text{M}}$ 12'31	2°19'37
	-4456 Mar 17 j 22:04	30° $\mathring{\text{R}}$ 0		min. Earth dist.	-4448 Apr 12 j 20:23	17° $\mathring{\text{M}}$ 12'18	29.28097 AU
opposition	-4456 Mar 25 j 11:20	29° $\mathring{\text{U}}$ 47'50	2°24'42	direct	-4448 Jul 02 j 07:57	15° $\mathring{\text{M}}$ 48'58	
min. Earth dist.	-4456 Mar 25 j 23:04	29° $\mathring{\text{U}}$ 47'03	29.30788 AU				
direct	-4456 Jun 14 j 12:31	28° $\mathring{\text{U}}$ 23'52		conjunction	-4448 Oct 13 j 21:36	18° $\mathring{\text{M}}$ 17'27	2°10'00
	-4456 Sep 02 j 23:12	0° $\mathring{\text{M}}$		minimum elong	-4448 Oct 13 j 21:36	18° $\mathring{\text{M}}$ 17'27	2°10'02
				max. Earth dist.	-4448 Oct 13 j 19:00	18° $\mathring{\text{M}}$ 17'12	31.27817 AU
conjunction	-4456 Sep 26 j 22:30	0° $\mathring{\text{M}}$ 53'07	2°15'32	retrograde	-4447 Jan 25 j 05:40	20° $\mathring{\text{M}}$ 46'10	
minimum elong	-4456 Sep 26 j 22:30	0° $\mathring{\text{M}}$ 53'07	2°15'38	opposition	-4447 Apr 15 j 06:11	19° $\mathring{\text{M}}$ 23'28	2°18'04
max. Earth dist.	-4456 Sep 26 j 10:38	0° $\mathring{\text{M}}$ 52'00	31.30381 AU	min. Earth dist.	-4447 Apr 15 j 08:57	19° $\mathring{\text{M}}$ 23'16	29.27823 AU
retrograde	-4455 Jan 07 j 16:01	3° $\mathring{\text{M}}$ 20'47		direct	-4447 Jul 04 j 19:47	17° $\mathring{\text{M}}$ 59'59	
opposition	-4455 Mar 27 j 23:57	1° $\mathring{\text{M}}$ 58'30	2°24'48				
min. Earth dist.	-4455 Mar 28 j 10:15	1° $\mathring{\text{M}}$ 57'48	29.30299 AU	conjunction	-4447 Oct 16 j 06:36	20° $\mathring{\text{M}}$ 28'23	2°08'26
direct	-4455 Jun 16 j 23:50	0° $\mathring{\text{M}}$ 34'33		minimum elong	-4447 Oct 16 j 06:37	20° $\mathring{\text{M}}$ 28'23	2°08'29
				max. Earth dist.	-4447 Oct 16 j 03:44	20° $\mathring{\text{M}}$ 28'07	31.27501 AU
conjunction	-4455 Sep 29 j 07:33	3° $\mathring{\text{M}}$ 03'41	2°15'31	retrograde	-4446 Jan 27 j 18:51	22° $\mathring{\text{M}}$ 57'15	
minimum elong	-4455 Sep 29 j 07:34	3° $\mathring{\text{M}}$ 03'41	2°15'37	opposition	-4446 Apr 17 j 19:01	21° $\mathring{\text{M}}$ 34'29	2°16'18
max. Earth dist.	-4455 Sep 28 j 21:23	3° $\mathring{\text{M}}$ 02'43	31.29866 AU	min. Earth dist.	-4446 Apr 17 j 20:26	21° $\mathring{\text{M}}$ 34'24	29.27444 AU
retrograde	-4454 Jan 10 j 02:04	5° $\mathring{\text{M}}$ 31'26		direct	-4446 Jul 07 j 05:49	20° $\mathring{\text{M}}$ 11'04	
opposition	-4454 Mar 30 j 12:34	4° $\mathring{\text{M}}$ 09'04	2°24'41				
min. Earth dist.	-4454 Mar 30 j 22:55	4° $\mathring{\text{M}}$ 08'22	29.29784 AU	conjunction	-4446 Oct 18 j 15:48	22° $\mathring{\text{M}}$ 39'24	2°06'42
direct	-4454 Jun 19 j 11:12	2° $\mathring{\text{M}}$ 45'07		minimum elong	-4446 Oct 18 j 15:48	22° $\mathring{\text{M}}$ 39'24	2°06'44
				max. Earth dist.	-4446 Oct 18 j 14:18	22° $\mathring{\text{M}}$ 39'15	31.27050 AU
conjunction	-4454 Oct 01 j 16:27	5° $\mathring{\text{M}}$ 14'08	2°15'18	retrograde	-4445 Jan 30 j 05:48	25° $\mathring{\text{M}}$ 08'24	
minimum elong	-4454 Oct 01 j 16:27	5° $\mathring{\text{M}}$ 14'08	2°15'24	opposition	-4445 Apr 20 j 08:14	23° $\mathring{\text{M}}$ 45'34	2°14'21
max. Earth dist.	-4454 Oct 01 j 06:52	5° $\mathring{\text{M}}$ 13'14	31.29376 AU	min. Earth dist.	-4445 Apr 20 j 09:52	23° $\mathring{\text{M}}$ 45'28	29.26921 AU
retrograde	-4453 Jan 12 j 13:19	7° $\mathring{\text{M}}$ 41'59		direct	-4445 Jul 09 j 16:43	22° $\mathring{\text{M}}$ 22'12	
opposition	-4453 Apr 02 j 01:12	6° $\mathring{\text{M}}$ 19'32	2°24'21				
min. Earth dist.	-4453 Apr 02 j 09:22	6° $\mathring{\text{M}}$ 18'59	29.29321 AU	conjunction	-4445 Oct 21 j 00:49	24° $\mathring{\text{M}}$ 50'25	2°04'47
direct	-4453 Jun 22 j 00:07	4° $\mathring{\text{M}}$ 55'37		minimum elong	-4445 Oct 21 j 00:49	24° $\mathring{\text{M}}$ 50'25	2°04'49
				max. Earth dist.	-4445 Oct 20 j 23:42	24° $\mathring{\text{M}}$ 50'19	31.26471 AU
conjunction	-4453 Oct 04 j 01:13	7° $\mathring{\text{M}}$ 24'31	2°14'54	retrograde	-4444 Feb 01 j 18:26	27° $\mathring{\text{M}}$ 19'33	
minimum elong	-4453 Oct 04 j 01:13	7° $\mathring{\text{M}}$ 24'31	2°15'00	opposition	-4444 Apr 21 j 21:17	25° $\mathring{\text{M}}$ 56'38	2°12'13
max. Earth dist.	-4453 Oct 03 j 16:57	7° $\mathring{\text{M}}$ 23'44	31.28949 AU	min. Earth dist.	-4444 Apr 21 j 21:10	25° $\mathring{\text{M}}$ 56'39	29.26263 AU
retrograde	-4452 Jan 15 j 00:24	9° $\mathring{\text{M}}$ 52'29		direct	-4444 Jul 11 j 05:31	24° $\mathring{\text{M}}$ 33'17	
opposition	-4452 Apr 03 j 14:03	8° $\mathring{\text{M}}$ 29'58	2°23'49				
min. Earth dist.	-4452 Apr 03 j 21:59	8° $\mathring{\text{M}}$ 29'25	29.28950 AU	conjunction	-4444 Oct 22 j 09:57	27° $\mathring{\text{M}}$ 01'24	2°02'42
direct	-4452 Jun 23 j 12:07	7° $\mathring{\text{M}}$ 06'06		minimum elong	-4444 Oct 22 j 09:57	27° $\mathring{\text{M}}$ 01'24	2°02'43
				max. Earth dist.	-4444 Oct 22 j 09:31	27° $\mathring{\text{M}}$ 01'22	31.25752 AU
conjunction	-4452 Oct 05 j 10:07	9° $\mathring{\text{M}}$ 34'55	2°14'18	retrograde	-4443 Feb 03 j 06:28	29° $\mathring{\text{M}}$ 30'39	
minimum elong	-4452 Oct 05 j 10:07	9° $\mathring{\text{M}}$ 34'55	2°14'23	opposition	-4443 Apr 24 j 10:17	28° $\mathring{\text{M}}$ 07'38	2°09'53
max. Earth dist.	-4452 Oct 05 j 03:13	9° $\mathring{\text{M}}$ 34'16	31.28636 AU	min. Earth dist.	-4443 Apr 24 j 10:27	28° $\mathring{\text{M}}$ 07'38	29.25497 AU
retrograde	-4451 Jan 16 j 10:48	12° $\mathring{\text{M}}$ 03'00		direct	-4443 Jul 13 j 17:14	26° $\mathring{\text{M}}$ 44'18	
opposition	-4451 Apr 06 j 02:36	10° $\mathring{\text{M}}$ 40'26	2°23'05				
min. Earth dist.	-4451 Apr 06 j 08:26	10° $\mathring{\text{M}}$ 40'02	29.28673 AU	conjunction	-4443 Oct 24 j 19:02	29° $\mathring{\text{M}}$ 12'18	2°00'26
direct	-4451 Jun 26 j 00:34	9° $\mathring{\text{M}}$ 16'38		minimum elong	-4443 Oct 24 j 19:03	29° $\mathring{\text{M}}$ 12'18	2°00'27
				max. Earth dist.	-4443 Oct 24 j 19:50	29° $\mathring{\text{M}}$ 12'23	31.24960 AU
conjunction	-4451 Oct 07 j 18:55	11° $\mathring{\text{M}}$ 45'22	2°13'31		-4443 Nov 15 j 03:29	0° $\mathring{\text{U}}$	
minimum elong	-4451 Oct 07 j 18:55	11° $\mathring{\text{M}}$ 45'22	2°13'36	retrograde	-4442 Feb 05 j 17:14	1° $\mathring{\text{U}}$ 41'40	
max. Earth dist.	-4451 Oct 07 j 12:31	11° $\mathring{\text{M}}$ 44'45	31.28400 AU	opposition	-4442 Apr 26 j 23:14	0° $\mathring{\text{U}}$ 18'33	2°07'22
retrograde	-4450 Jan 18 j 21:08	14° $\mathring{\text{M}}$ 13'36		min. Earth dist.	-4442 Apr 26 j 21:30	0° $\mathring{\text{U}}$ 18'40	29.24669 AU
opposition	-4450 Apr 08 j 15:24	12° $\mathring{\text{M}}$ 51'00	2°22'08		-4442 May 08 j 12:40	30° $\mathring{\text{R}}$ 0	
min. Earth dist.	-4450 Apr 08 j 20:53	12° $\mathring{\text{M}}$ 50'37	29.28472 AU	direct	-4442 Jul 16 j 06:07	28° $\mathring{\text{M}}$ 55'13	
direct	-4450 Jun 28 j 10:40	11° $\mathring{\text{M}}$ 27'17			-4442 Sep 18 j 07:16	0° $\mathring{\text{U}}$	
conjunction	-4450 Oct 10 j 03:46	13° $\mathring{\text{M}}$ 55'55	2°12'32	conjunction	-4442 Oct 27 j 03:53	1° $\mathring{\text{U}}$ 23'07	1°57'59
minimum elong	-4450 Oct 10 j 03:46	13° $\mathring{\text{M}}$ 55'56	2°12'36	minimum elong	-4442 Oct 27 j 03:53	1° $\mathring{\text{U}}$ 23'07	1°57'59
max. Earth dist.	-4450 Oct 09 j 23:21	13° $\mathring{\text{M}}$ 55'30	31.28220 AU	max. Earth dist.	-4442 Oct 27 j 05:02	1° $\mathring{\text{U}}$ 23'13	31.24132 AU
retrograde	-4449 Jan 21 j 06:41	16° $\mathring{\text{M}}$ 24'19		retrograde	-4441 Feb 08 j 04:06	3° $\mathring{\text{U}}$ 52'37	
opposition	-4449 Apr 11 j 04:14	15° $\mathring{\text{M}}$ 01'41	2°20'59	opposition	-4441 Apr 29 j 12:20	2° $\mathring{\text{U}}$ 29'24	2°04'41
min. Earth dist.	-4449 Apr 11 j 08:22	15° $\mathring{\text{M}}$ 01'24	29.28287 AU	min. Earth dist.	-4441 Apr 29 j 10:12	2° $\mathring{\text{U}}$ 29'32	29.23861 AU
direct	-4449 Jun 30 j 22:29	13° $\mathring{\text{M}}$ 38'03		direct	-4441 Jul 18 j 16:53	1° $\mathring{\text{U}}$ 06'05	
conjunction	-4449 Oct 12 j 12:36	16° $\mathring{\text{M}}$ 06'37	2°11'21	conjunction	-4441 Oct 29 j 12:58	3° $\mathring{\text{U}}$ 33'53	1°55'23
minimum elong	-4449 Oct 12 j 12:37	16° $\mathring{\text{M}}$ 06'37	2°11'26	minimum elong	-4441 Oct 29 j 12:58	3° $\mathring{\text{U}}$ 33'53	1°55'23
max. Earth dist.	-4449 Oct 12 j 08:09	16° $\mathring{\text{M}}$ 06'12	31.28041 AU	max. Earth dist.	-4441 Oct 29 j 16:16	3° $\mathring{\text{U}}$ 34'12	31.23355 AU

Attention, astronomical year style is used: The year -4440 in astronomical counting style is the year 4441 BCE in historical counting style.

retrograde	-4440 Feb 10 j 13:53	6° <u>♂</u> 03'31		direct	-4432 Aug 06 j 19:45	20° <u>♂</u> 49'17	
opposition	-4440 May 01 j 01:17	4° <u>♂</u> 40'13	2°01'48				
min. Earth dist.	-4440 Apr 30 j 21:34	4° <u>♂</u> 40'28	29.23114 AU	conjunction	-4432 Nov 17 j 00:42	23° <u>♂</u> 16'39	1°24'48
direct	-4440 Jul 20 j 05:08	3° <u>♂</u> 16'57		minimum elong	-4432 Nov 17 j 00:43	23° <u>♂</u> 16'39	1°24'44
				max. Earth dist.	-4432 Nov 17 j 11:46	23° <u>♂</u> 17'42	31.17507 AU
conjunction	-4440 Oct 30 j 21:52	5° <u>♂</u> 44'40	1°52'37	retrograde	-4431 Mar 02 j 04:08	25° <u>♂</u> 47'51	
minimum elong	-4440 Oct 30 j 21:53	5° <u>♂</u> 44'40	1°52'36	opposition	-4431 May 21 j 22:52	24° <u>♂</u> 24'04	1°28'25
max. Earth dist.	-4440 Oct 31 j 01:18	5° <u>♂</u> 44'59	31.22662 AU	min. Earth dist.	-4431 May 21 j 11:38	24° <u>♂</u> 24'50	29.17043 AU
retrograde	-4439 Feb 12 j 02:30	8° <u>♂</u> 14'28		direct	-4431 Aug 09 j 09:06	23° <u>♂</u> 01'17	
opposition	-4439 May 03 j 14:14	6° <u>♂</u> 51'06	1°58'45				
min. Earth dist.	-4439 May 03 j 09:21	6° <u>♂</u> 51'26	29.22467 AU	conjunction	-4431 Nov 19 j 10:14	25° <u>♂</u> 28'34	1°20'43
direct	-4439 Jul 22 j 14:48	5° <u>♂</u> 27'53		minimum elong	-4431 Nov 19 j 10:14	25° <u>♂</u> 28'34	1°20'38
				max. Earth dist.	-4431 Nov 19 j 20:55	25° <u>♂</u> 29'35	31.16426 AU
conjunction	-4439 Nov 02 j 07:00	7° <u>♂</u> 55'32	1°49'40	retrograde	-4430 Mar 04 j 16:40	27° <u>♂</u> 59'53	
minimum elong	-4439 Nov 02 j 07:01	7° <u>♂</u> 55'32	1°49'39	opposition	-4430 May 24 j 11:55	26° <u>♂</u> 36'00	1°23'59
max. Earth dist.	-4439 Nov 02 j 12:31	7° <u>♂</u> 56'04	31.22055 AU	min. Earth dist.	-4430 May 24 j 00:02	26° <u>♂</u> 36'48	29.15922 AU
retrograde	-4438 Feb 14 j 12:41	10° <u>♂</u> 25'31		direct	-4430 Aug 11 j 19:34	25° <u>♂</u> 13'11	
opposition	-4438 May 06 j 03:08	9° <u>♂</u> 02'07	1°55'31				
min. Earth dist.	-4438 May 05 j 21:26	9° <u>♂</u> 02'30	29.21890 AU	conjunction	-4430 Nov 21 j 19:56	27° <u>♂</u> 40'23	1°16'31
direct	-4438 Jul 25 j 02:04	7° <u>♂</u> 38'58		minimum elong	-4430 Nov 21 j 19:56	27° <u>♂</u> 40'23	1°16'25
				max. Earth dist.	-4430 Nov 22 j 08:23	27° <u>♂</u> 41'34	31.15284 AU
conjunction	-4438 Nov 04 j 16:03	10° <u>♂</u> 06'35	1°46'34		-4429 Feb 08 j 04:28	0° <u>♂</u>	
minimum elong	-4438 Nov 04 j 16:03	10° <u>♂</u> 06'35	1°46'32	retrograde	-4429 Mar 07 j 02:08	0° <u>♂</u> 11'49	
max. Earth dist.	-4438 Nov 04 j 21:47	10° <u>♂</u> 07'07	31.21530 AU		-4429 Apr 03 j 16:10	30° <u>♂</u>	
retrograde	-4437 Feb 17 j 02:08	12° <u>♂</u> 36'45		opposition	-4429 May 27 j 00:59	28° <u>♂</u> 47'49	1°19'25
opposition	-4437 May 08 j 16:09	11° <u>♂</u> 13'18	1°52'07	min. Earth dist.	-4429 May 26 j 12:31	28° <u>♂</u> 48'40	29.14770 AU
min. Earth dist.	-4437 May 08 j 08:41	11° <u>♂</u> 13'49	29.21382 AU	direct	-4429 Aug 14 j 07:33	27° <u>♂</u> 25'00	
direct	-4437 Jul 27 j 11:17	9° <u>♂</u> 50'15					
				conjunction	-4429 Nov 24 j 05:28	29° <u>♂</u> 52'06	1°12'12
conjunction	-4437 Nov 07 j 01:12	12° <u>♂</u> 17'49	1°43'18	minimum elong	-4429 Nov 24 j 05:29	29° <u>♂</u> 52'06	1°12'06
minimum elong	-4437 Nov 07 j 01:13	12° <u>♂</u> 17'49	1°43'17	max. Earth dist.	-4429 Nov 24 j 18:08	29° <u>♂</u> 53'18	31.14159 AU
max. Earth dist.	-4437 Nov 07 j 08:35	12° <u>♂</u> 18'31	31.21032 AU		-4429 Nov 27 j 16:45	0° <u>♂</u>	
retrograde	-4436 Feb 19 j 13:38	14° <u>♂</u> 48'11		retrograde	-4428 Mar 08 j 14:55	2° <u>♂</u> 23'40	
opposition	-4436 May 10 j 05:19	13° <u>♂</u> 24'43	1°48'33	opposition	-4428 May 28 j 13:57	0° <u>♂</u> 59'33	1°14'45
min. Earth dist.	-4436 May 09 j 21:53	13° <u>♂</u> 25'13	29.20880 AU	min. Earth dist.	-4428 May 27 j 23:52	1° <u>♂</u> 00'30	29.13667 AU
direct	-4436 Jul 28 j 21:10	12° <u>♂</u> 01'44			-4428 Jul 08 j 06:05	30° <u>♂</u>	
				direct	-4428 Aug 15 j 17:26	29° <u>♂</u> 36'42	
conjunction	-4436 Nov 08 j 10:31	14° <u>♂</u> 29'16	1°39'53		-4428 Sep 21 j 22:51	0° <u>♂</u>	
minimum elong	-4436 Nov 08 j 10:32	14° <u>♂</u> 29'16	1°39'51	conjunction	-4428 Nov 25 j 15:15	2° <u>♂</u> 03'46	1°07'46
max. Earth dist.	-4436 Nov 08 j 18:35	14° <u>♂</u> 30'02	31.20532 AU	minimum elong	-4428 Nov 25 j 15:15	2° <u>♂</u> 03'46	1°07'40
retrograde	-4435 Feb 21 j 03:19	16° <u>♂</u> 59'49		max. Earth dist.	-4428 Nov 26 j 05:21	2° <u>♂</u> 05'06	31.13085 AU
opposition	-4435 May 12 j 18:10	15° <u>♂</u> 36'20	1°44'49	retrograde	-4427 Mar 11 j 01:58	4° <u>♂</u> 35'28	
min. Earth dist.	-4435 May 12 j 09:00	15° <u>♂</u> 36'57	29.20345 AU	opposition	-4427 May 31 j 02:46	3° <u>♂</u> 11'15	1°09'58
direct	-4435 Jul 31 j 09:12	14° <u>♂</u> 13'25		min. Earth dist.	-4427 May 30 j 12:40	3° <u>♂</u> 12'13	29.12638 AU
				direct	-4427 Aug 18 j 03:42	1° <u>♂</u> 48'25	
conjunction	-4435 Nov 10 j 19:55	16° <u>♂</u> 40'56	1°36'19				
minimum elong	-4435 Nov 10 j 19:56	16° <u>♂</u> 40'56	1°36'17	conjunction	-4427 Nov 28 j 01:01	4° <u>♂</u> 15'25	1°03'15
max. Earth dist.	-4435 Nov 11 j 04:29	16° <u>♂</u> 41'45	31.19956 AU	minimum elong	-4427 Nov 28 j 01:02	4° <u>♂</u> 15'25	1°03'09
retrograde	-4434 Feb 23 j 16:56	19° <u>♂</u> 11'40		max. Earth dist.	-4427 Nov 28 j 16:03	4° <u>♂</u> 16'51	31.12118 AU
opposition	-4434 May 15 j 07:24	17° <u>♂</u> 48'08	1°40'56	retrograde	-4426 Mar 13 j 15:22	6° <u>♂</u> 47'16	
min. Earth dist.	-4434 May 14 j 22:35	17° <u>♂</u> 48'43	29.19722 AU	opposition	-4426 Jun 02 j 15:37	5° <u>♂</u> 22'59	1°05'05
direct	-4434 Aug 02 j 20:07	16° <u>♂</u> 25'17		min. Earth dist.	-4426 Jun 01 j 23:29	5° <u>♂</u> 24'05	29.11712 AU
				direct	-4426 Aug 20 j 15:02	4° <u>♂</u> 00'10	
conjunction	-4434 Nov 13 j 05:23	18° <u>♂</u> 52'45	1°32'37				
minimum elong	-4434 Nov 13 j 05:24	18° <u>♂</u> 52'46	1°32'33	conjunction	-4426 Nov 30 j 10:41	6° <u>♂</u> 27'09	0°58'38
max. Earth dist.	-4434 Nov 13 j 15:08	18° <u>♂</u> 53'41	31.19282 AU	minimum elong	-4426 Nov 30 j 10:41	6° <u>♂</u> 27'09	0°58'31
retrograde	-4433 Feb 26 j 04:45	21° <u>♂</u> 23'40		max. Earth dist.	-4426 Dec 01 j 02:25	6° <u>♂</u> 28'38	31.11236 AU
opposition	-4433 May 17 j 20:34	20° <u>♂</u> 00'04	1°36'54	retrograde	-4425 Mar 16 j 04:35	8° <u>♂</u> 59'10	
min. Earth dist.	-4433 May 17 j 10:07	20° <u>♂</u> 00'46	29.18969 AU	opposition	-4425 Jun 05 j 04:40	7° <u>♂</u> 34'49	1°00'06
direct	-4433 Aug 05 j 08:37	18° <u>♂</u> 37'16		min. Earth dist.	-4425 Jun 04 j 12:37	7° <u>♂</u> 35'55	29.10874 AU
				direct	-4425 Aug 23 j 01:00	6° <u>♂</u> 12'02	
conjunction	-4433 Nov 15 j 14:58	21° <u>♂</u> 04'41	1°28'47				
minimum elong	-4433 Nov 15 j 14:58	21° <u>♂</u> 04'41	1°28'43	conjunction	-4425 Dec 02 j 20:41	8° <u>♂</u> 39'01	0°53'55
max. Earth dist.	-4433 Nov 16 j 00:27	21° <u>♂</u> 05'35	31.18463 AU	minimum elong	-4425 Dec 02 j 20:41	8° <u>♂</u> 39'01	0°53'49
retrograde	-4432 Feb 28 j 17:07	23° <u>♂</u> 35'45		max. Earth dist.	-4425 Dec 03 j 13:56	8° <u>♂</u> 40'39	31.10443 AU
opposition	-4432 May 19 j 09:47	22° <u>♂</u> 12'05	1°32'43	retrograde	-4424 Mar 17 j 17:13	11° <u>♂</u> 11'12	
min. Earth dist.	-4432 May 18 j 23:31	22° <u>♂</u> 12'46	29.18080 AU				

Attention, astronomical year style is used: The year -4424 in astronomical counting style is the year 4425 BCE in historical counting style.

opposition	-4424 Jun 06 j 17:24	9°M46'49	0°55'01	max. Earth dist.	-4417 Dec 21 j 04:52	26°M21'35	31.02604 AU
min. Earth dist.	-4424 Jun 05 j 23:36	9°M48'02	29.10097 AU	retrograde	-4416 Apr 04 j 21:55	28°M52'57	
direct	-4424 Aug 24 j 12:52	8°M24'04		opposition	-4416 Jun 24 j 23:59	27°M28'05	0°11'58
				min. Earth dist.	-4416 Jun 24 j 03:39	27°M29'29	29.02046 AU
conjunction	-4424 Dec 04 j 06:39	10°M51'04	0°49'07	direct	-4416 Sep 11 j 03:58	26°M05'21	
minimum elong	-4424 Dec 04 j 06:39	10°M51'04	0°48'59				
max. Earth dist.	-4424 Dec 04 j 23:47	10°M52'41	31.09683 AU	conjunction	-4416 Dec 21 j 18:58	28°M32'23	0°08'43
retrograde	-4423 Mar 20 j 06:54	13°M23'25		minimum elong	-4416 Dec 21 j 18:59	28°M32'23	0°08'32
opposition	-4423 Jun 09 j 06:21	11°M59'00	0°49'50	behind sun begin	-4416 Dec 21 j 13:20	28°M31'52	
min. Earth dist.	-4423 Jun 08 j 12:40	12°M00'13	29.09342 AU	behind sun end	-4416 Dec 22 j 00:37	28°M32'53	
direct	-4423 Aug 26 j 23:30	10°M36'19		max. Earth dist.	-4416 Dec 22 j 17:02	28°M34'27	31.01462 AU
					-4415 Jan 31 j 20:39	0°M	
conjunction	-4423 Dec 06 j 16:50	13°M03'20	0°44'15	retrograde	-4415 Apr 07 j 10:47	1°M05'48	
minimum elong	-4423 Dec 06 j 16:50	13°M03'20	0°44'07		-4415 Jun 15 j 19:24	30°RM	
max. Earth dist.	-4423 Dec 07 j 11:43	13°M05'07	31.08917 AU	opposition	-4415 Jun 27 j 12:27	29°M40'52	0°06'25
	-4422 Feb 03 j 05:06	15°M		min. Earth dist.	-4415 Jun 26 j 14:29	29°M42'22	29.00947 AU
retrograde	-4422 Mar 22 j 19:14	15°M35'51		direct	-4415 Sep 13 j 15:54	28°M18'05	
	-4422 May 11 j 03:08	15°RM			-4415 Dec 04 j 01:23	0°M	
opposition	-4422 Jun 11 j 19:11	14°M11'25	0°44'35	conjunction	-4415 Dec 24 j 05:37	0°M45'08	0°03'33
min. Earth dist.	-4422 Jun 11 j 00:34	14°M12'41	29.08546 AU	minimum elong	-4415 Dec 24 j 05:37	0°M45'08	0°03'22
direct	-4422 Aug 29 j 12:19	12°M48'46		behind sun begin	-4415 Dec 23 j 23:12	0°M44'33	
	-4422 Dec 02 j 04:15	15°M		behind sun end	-4415 Dec 24 j 12:01	0°M45'42	
conjunction	-4422 Dec 09 j 03:07	15°M15'48	0°39'18	max. Earth dist.	-4415 Dec 25 j 03:29	0°M47'11	31.00415 AU
minimum elong	-4422 Dec 09 j 03:07	15°M15'48	0°39'09	retrograde	-4414 Apr 10 j 01:01	3°M18'40	
max. Earth dist.	-4422 Dec 09 j 21:27	15°M17'32	31.08100 AU	min. Earth dist.	-4414 Jun 29 j 03:08	1°M55'10	28.99973 AU
retrograde	-4421 Mar 25 j 08:47	17°M48'30		opposition	-4414 Jun 30 j 01:04	1°M53'39	0°00'51
opposition	-4421 Jun 14 j 08:08	16°M24'01	0°39'16	desc. node	-4414 Aug 25 j 15:55	0°M38'39	
min. Earth dist.	-4421 Jun 13 j 13:12	16°M25'18	29.07694 AU	direct	-4414 Sep 16 j 02:48	0°M30'52	
direct	-4421 Aug 31 j 22:27	15°M01'24					
conjunction	-4421 Dec 11 j 13:38	17°M28'26	0°34'18	conjunction	-4414 Dec 26 j 16:36	2°M57'57	0°-1'-46
minimum elong	-4421 Dec 11 j 13:38	17°M28'26	0°34'09	minimum elong	-4414 Dec 26 j 16:36	2°M57'57	0°01'58
max. Earth dist.	-4421 Dec 12 j 09:15	17°M30'18	31.07188 AU	behind sun begin	-4414 Dec 26 j 10:09	2°M57'22	
retrograde	-4420 Mar 26 j 19:24	20°M01'18		behind sun end	-4414 Dec 26 j 23:03	2°M58'31	
opposition	-4420 Jun 15 j 21:04	18°M36'46	0°33'53	max. Earth dist.	-4414 Dec 27 j 16:18	3°M00'11	30.99503 AU
min. Earth dist.	-4420 Jun 15 j 02:04	18°M38'04	29.06717 AU	retrograde	-4413 Apr 12 j 14:11	5°M31'36	
direct	-4420 Sep 02 j 10:24	17°M14'10		opposition	-4413 Jul 02 j 13:31	4°M06'32	0°-4'-41
				min. Earth dist.	-4413 Jul 01 j 14:30	4°M08'07	28.99121 AU
conjunction	-4420 Dec 13 j 00:15	19°M41'13	0°29'15	direct	-4413 Sep 18 j 15:37	2°M43'45	
minimum elong	-4420 Dec 13 j 00:15	19°M41'13	0°29'06	conjunction	-4413 Dec 29 j 03:33	5°M10'52	0°-6'-59
max. Earth dist.	-4420 Dec 13 j 19:24	19°M43'01	31.06162 AU	minimum elong	-4413 Dec 29 j 03:32	5°M10'52	0°07'11
retrograde	-4419 Mar 29 j 08:56	22°M14'12		behind sun begin	-4413 Dec 28 j 21:35	5°M10'20	
opposition	-4419 Jun 18 j 09:46	20°M49'37	0°28'28	behind sun end	-4413 Dec 29 j 09:29	5°M11'24	
min. Earth dist.	-4419 Jun 17 j 13:53	20°M50'58	29.05629 AU	max. Earth dist.	-4413 Dec 30 j 02:51	5°M13'04	30.98717 AU
direct	-4419 Sep 04 j 20:28	19°M26'59		retrograde	-4412 Apr 14 j 03:45	7°M44'39	
conjunction	-4419 Dec 15 j 10:55	21°M54'02	0°24'09	min. Earth dist.	-4412 Jul 03 j 02:39	6°M21'10	28.98391 AU
minimum elong	-4419 Dec 15 j 10:55	21°M54'02	0°24'00	opposition	-4412 Jul 04 j 02:02	6°M19'34	0°-10'-15
max. Earth dist.	-4419 Dec 16 j 06:50	21°M55'55	31.05016 AU	direct	-4412 Sep 20 j 01:35	4°M56'47	
retrograde	-4418 Mar 31 j 20:07	24°M27'09		conjunction	-4412 Dec 30 j 14:47	7°M23'57	0°-12'-10
opposition	-4418 Jun 20 j 22:40	23°M02'29	0°22'59	minimum elong	-4412 Dec 30 j 14:47	7°M23'57	0°12'22
min. Earth dist.	-4418 Jun 20 j 03:16	23°M03'48	29.04441 AU	behind sun begin	-4412 Dec 30 j 10:30	7°M23'33	
direct	-4418 Sep 07 j 06:59	21°M39'50		behind sun end	-4412 Dec 30 j 19:04	7°M24'20	
conjunction	-4418 Dec 17 j 21:28	24°M06'51	0°19'02	max. Earth dist.	-4412 Dec 31 j 15:30	7°M26'17	30.98019 AU
minimum elong	-4418 Dec 17 j 21:28	24°M06'51	0°18'52	retrograde	-4411 Apr 16 j 15:28	9°M57'50	
max. Earth dist.	-4418 Dec 18 j 17:58	24°M08'47	31.03817 AU	opposition	-4411 Jul 06 j 14:23	8°M32'45	0°-15'-49
retrograde	-4417 Apr 03 j 09:15	26°M40'04		min. Earth dist.	-4411 Jul 05 j 14:51	8°M34'22	28.97726 AU
opposition	-4417 Jun 23 j 11:22	25°M15'18	0°17'29	direct	-4411 Sep 22 j 13:51	7°M10'00	
min. Earth dist.	-4417 Jun 22 j 14:32	25°M16'44	29.03227 AU	conjunction	-4410 Jan 02 j 02:03	9°M37'13	0°-17'-20
direct	-4417 Sep 09 j 18:32	23°M52'36		minimum elong	-4410 Jan 02 j 02:03	9°M37'13	0°17'33
conjunction	-4417 Dec 20 j 08:09	26°M19'38	0°13'53	max. Earth dist.	-4410 Jan 03 j 02:29	9°M39'31	30.97388 AU
minimum elong	-4417 Dec 20 j 08:09	26°M19'38	0°13'43	retrograde	-4410 Apr 19 j 06:11	12°M11'14	
behind sun begin	-4417 Dec 20 j 04:37	26°M19'19		min. Earth dist.	-4410 Jul 08 j 02:26	10°M47'49	28.97110 AU
behind sun end	-4417 Dec 20 j 11:40	26°M19'57		opposition	-4410 Jul 09 j 02:50	10°M46'08	0°-21'-21
				direct	-4410 Sep 25 j 00:23	9°M23'24	

Attention, astronomical year style is used: The year -4409 in astronomical counting style is the year 4410 BCE in historical counting style.

conjunction	-4409 Jan 04 j 13:27	11° $\mathring{\text{A}}$ 50'40	0°-22'-30	minimum elong	-4401 Jan 22 j 13:28	29° $\mathring{\text{A}}$ 41'04	1°02'17
minimum elong	-4409 Jan 04 j 13:27	11° $\mathring{\text{A}}$ 50'40	0°22'43	max. Earth dist.	-4401 Jan 23 j 14:52	29° $\mathring{\text{A}}$ 43'28	30.89878 AU
max. Earth dist.	-4409 Jan 05 j 14:34	11° $\mathring{\text{A}}$ 53'02	30.96757 AU		-4401 Jan 30 j 22:38	0° $\mathring{\text{C}}$	
retrograde	-4409 Apr 21 j 17:26	14° $\mathring{\text{A}}$ 24'50		retrograde	-4401 May 10 j 05:11	2° $\mathring{\text{C}}$ 15'44	
opposition	-4409 Jul 11 j 15:24	12° $\mathring{\text{A}}$ 59'43	0°-26'-52	opposition	-4401 Jul 29 j 17:08	0° $\mathring{\text{C}}$ 50'17	-1°-8'-54
min. Earth dist.	-4409 Jul 10 j 15:47	13° $\mathring{\text{A}}$ 01'21	28.96466 AU	min. Earth dist.	-4401 Jul 28 j 16:31	0° $\mathring{\text{C}}$ 52'00	28.89614 AU
direct	-4409 Sep 27 j 11:00	11° $\mathring{\text{A}}$ 36'59			-4401 Aug 30 j 22:27	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$	
				direct	-4401 Oct 15 j 05:31	29° $\mathring{\text{A}}$ 27'12	
conjunction	-4408 Jan 07 j 01:14	14° $\mathring{\text{A}}$ 04'19	0°-27'-38		-4401 Nov 28 j 02:13	0° $\mathring{\text{C}}$	
minimum elong	-4408 Jan 07 j 01:13	14° $\mathring{\text{A}}$ 04'19	0°27'51				
max. Earth dist.	-4408 Jan 08 j 02:27	14° $\mathring{\text{A}}$ 06'42	30.96088 AU	conjunction	-4400 Jan 25 j 01:56	1° $\mathring{\text{C}}$ 55'01	-1°-6'-41
retrograde	-4408 Apr 23 j 06:37	16° $\mathring{\text{A}}$ 38'34		minimum elong	-4400 Jan 25 j 01:55	1° $\mathring{\text{C}}$ 55'01	1°06'54
min. Earth dist.	-4408 Jul 12 j 03:13	15° $\mathring{\text{A}}$ 15'08	28.95756 AU	max. Earth dist.	-4400 Jan 26 j 03:54	1° $\mathring{\text{C}}$ 57'28	30.89237 AU
opposition	-4408 Jul 13 j 03:40	15° $\mathring{\text{A}}$ 13'27	0°-32'-21	retrograde	-4400 May 11 j 16:26	4° $\mathring{\text{C}}$ 29'45	
direct	-4408 Sep 28 j 21:59	13° $\mathring{\text{A}}$ 50'42		min. Earth dist.	-4400 Jul 30 j 05:09	3° $\mathring{\text{C}}$ 05'58	28.89044 AU
				opposition	-4400 Jul 31 j 05:02	3° $\mathring{\text{C}}$ 04'18	-1°-13'-47
conjunction	-4407 Jan 08 j 13:04	16° $\mathring{\text{A}}$ 18'06	0°-32'-45	direct	-4400 Oct 16 j 16:13	1° $\mathring{\text{C}}$ 41'13	
minimum elong	-4407 Jan 08 j 13:04	16° $\mathring{\text{A}}$ 18'06	0°32'57				
max. Earth dist.	-4407 Jan 09 j 13:46	16° $\mathring{\text{A}}$ 20'26	30.95316 AU				
retrograde	-4407 Apr 25 j 19:16	18° $\mathring{\text{A}}$ 52'27					
opposition	-4407 Jul 15 j 16:13	17° $\mathring{\text{A}}$ 27'17	0°-37'-47				
min. Earth dist.	-4407 Jul 14 j 16:54	17° $\mathring{\text{A}}$ 28'54	28.94938 AU				
direct	-4407 Oct 01 j 07:21	16° $\mathring{\text{A}}$ 04'30					
conjunction	-4406 Jan 11 j 00:57	18° $\mathring{\text{A}}$ 31'57	0°-37'-48				
minimum elong	-4406 Jan 11 j 00:57	18° $\mathring{\text{A}}$ 31'57	0°38'01				
max. Earth dist.	-4406 Jan 12 j 02:17	18° $\mathring{\text{A}}$ 34'20	30.94445 AU				
retrograde	-4406 Apr 28 j 08:31	21° $\mathring{\text{A}}$ 06'22					
min. Earth dist.	-4406 Jul 17 j 04:19	19° $\mathring{\text{A}}$ 42'50	28.94015 AU				
opposition	-4406 Jul 18 j 04:33	19° $\mathring{\text{A}}$ 41'09	0°-43'-9				
direct	-4406 Oct 03 j 19:37	18° $\mathring{\text{A}}$ 18'19					
conjunction	-4405 Jan 13 j 12:52	20° $\mathring{\text{A}}$ 45'49	0°-42'-47				
minimum elong	-4405 Jan 13 j 12:52	20° $\mathring{\text{A}}$ 45'49	0°43'01				
max. Earth dist.	-4405 Jan 14 j 13:14	20° $\mathring{\text{A}}$ 48'06	30.93485 AU				
retrograde	-4405 Apr 30 j 22:34	23° $\mathring{\text{A}}$ 20'17					
opposition	-4405 Jul 20 j 16:53	21° $\mathring{\text{A}}$ 55'00	0°-48'-28				
min. Earth dist.	-4405 Jul 19 j 17:29	21° $\mathring{\text{A}}$ 56'37	28.93040 AU				
direct	-4405 Oct 06 j 06:22	20° $\mathring{\text{A}}$ 32'06					
conjunction	-4404 Jan 16 j 01:03	22° $\mathring{\text{A}}$ 59'38	0°-47'-43				
minimum elong	-4404 Jan 16 j 01:03	22° $\mathring{\text{A}}$ 59'38	0°47'57				
max. Earth dist.	-4404 Jan 17 j 02:36	23° $\mathring{\text{A}}$ 02'03	30.92494 AU				
retrograde	-4404 May 02 j 11:35	25° $\mathring{\text{A}}$ 34'09					
min. Earth dist.	-4404 Jul 21 j 05:08	24° $\mathring{\text{A}}$ 10'28	28.92052 AU				
opposition	-4404 Jul 22 j 05:01	24° $\mathring{\text{A}}$ 08'48	0°-53'-42				
direct	-4404 Oct 07 j 19:18	22° $\mathring{\text{A}}$ 45'51					
conjunction	-4403 Jan 17 j 13:04	25° $\mathring{\text{A}}$ 13'26	0°-52'-35				
minimum elong	-4403 Jan 17 j 13:04	25° $\mathring{\text{A}}$ 13'26	0°52'49				
max. Earth dist.	-4403 Jan 18 j 13:45	25° $\mathring{\text{A}}$ 15'45	30.91526 AU				
retrograde	-4403 May 05 j 01:31	27° $\mathring{\text{A}}$ 48'00					
opposition	-4403 Jul 24 j 17:04	26° $\mathring{\text{A}}$ 22'35	0°-58'-51				
min. Earth dist.	-4403 Jul 23 j 17:14	26° $\mathring{\text{A}}$ 24'15	28.91130 AU				
direct	-4403 Oct 10 j 05:40	24° $\mathring{\text{A}}$ 59'35					
conjunction	-4402 Jan 20 j 01:19	27° $\mathring{\text{A}}$ 27'14	0°-57'-22				
minimum elong	-4402 Jan 20 j 01:18	27° $\mathring{\text{A}}$ 27'14	0°57'36				
max. Earth dist.	-4402 Jan 21 j 03:09	27° $\mathring{\text{A}}$ 29'40	30.90637 AU				
	-4402 Apr 26 j 22:22	0° $\mathring{\text{C}}$					
retrograde	-4402 May 07 j 14:12	0° $\mathring{\text{C}}$ 01'50					
	-4402 May 18 j 05:23	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$					
min. Earth dist.	-4402 Jul 26 j 05:16	28° $\mathring{\text{A}}$ 38'04	28.90303 AU				
opposition	-4402 Jul 27 j 05:08	28° $\mathring{\text{A}}$ 36'24	-1°-3'-56				
direct	-4402 Oct 12 j 18:22	27° $\mathring{\text{A}}$ 13'21					
conjunction	-4401 Jan 22 j 13:28	29° $\mathring{\text{A}}$ 41'04	-1°-2'-4				

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Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

conjunction	-4400 Jan 25 j 01:56	1° $\overline{55}$ '01	-1°-6'-41	minimum elong	-4392 Feb 12 j 10:08	19° $\overline{52}$ '44	1°39'41
minimum elong	-4400 Jan 25 j 01:55	1° $\overline{55}$ '01	1°06'54	max. Earth dist.	-4392 Feb 13 j 09:10	19° $\overline{54}$ '54	30.85216 AU
max. Earth dist.	-4400 Jan 26 j 03:54	1° $\overline{57}$ '28	30.89237 AU	retrograde	-4392 May 30 j 05:12	22° $\overline{27}$ '44	
retrograde	-4400 May 11 j 16:26	4° $\overline{29}$ '45		min. Earth dist.	-4392 Aug 17 j 06:16	21° $\overline{03}$ '49	28.84967 AU
min. Earth dist.	-4400 Jul 30 j 05:09	3° $\overline{05}$ '58	28.89044 AU	opposition	-4392 Aug 18 j 03:51	21° $\overline{02}$ '18	-1°-48'-17
opposition	-4400 Jul 31 j 05:02	3° $\overline{04}$ '18	-1°-13'-47	direct	-4392 Nov 03 j 10:47	19° $\overline{38}$ '53	
direct	-4400 Oct 16 j 16:13	1° $\overline{41}$ '13					
conjunction	-4399 Jan 26 j 14:29	4° $\overline{09}$ '08	-1°-11'-11	conjunction	-4391 Feb 13 j 23:36	22° $\overline{07}$ '36	-1°-42'-57
minimum elong	-4399 Jan 26 j 14:28	4° $\overline{09}$ '08	1°11'25	minimum elong	-4391 Feb 13 j 23:36	22° $\overline{07}$ '36	1°43'10
max. Earth dist.	-4399 Jan 27 j 16:36	4° $\overline{11}$ '35	30.88730 AU	max. Earth dist.	-4391 Feb 14 j 22:44	22° $\overline{09}$ '46	30.84485 AU
retrograde	-4399 May 14 j 05:51	6° $\overline{43}$ '56		retrograde	-4391 Jun 01 j 17:03	24° $\overline{42}$ '32	
opposition	-4399 Aug 02 j 16:55	5° $\overline{18}$ '30	-1°-18'-33	opposition	-4391 Aug 20 j 15:29	23° $\overline{17}$ '04	-1°-51'-56
min. Earth dist.	-4399 Aug 01 j 16:05	5° $\overline{20}$ '14	28.88589 AU	min. Earth dist.	-4391 Aug 19 j 19:01	23° $\overline{18}$ '30	28.84262 AU
direct	-4399 Oct 19 j 03:08	3° $\overline{55}$ '25		direct	-4391 Nov 05 j 22:26	21° $\overline{53}$ '34	
conjunction	-4398 Jan 29 j 02:55	6° $\overline{23}$ '26	-1°-15'-36	conjunction	-4390 Feb 16 j 12:55	24° $\overline{22}$ '20	-1°-46'-16
minimum elong	-4398 Jan 29 j 02:55	6° $\overline{23}$ '26	1°15'50	minimum elong	-4390 Feb 16 j 12:55	24° $\overline{22}$ '20	1°46'29
max. Earth dist.	-4398 Jan 30 j 04:46	6° $\overline{25}$ '53	30.88306 AU	max. Earth dist.	-4390 Feb 17 j 11:46	24° $\overline{24}$ '29	30.83817 AU
retrograde	-4398 May 16 j 18:38	8° $\overline{58}$ '20		retrograde	-4390 Jun 04 j 07:07	26° $\overline{57}$ '14	
min. Earth dist.	-4398 Aug 04 j 05:15	7° $\overline{34}$ '35	28.88207 AU	min. Earth dist.	-4390 Aug 22 j 05:51	25° $\overline{33}$ '13	28.83641 AU
opposition	-4398 Aug 05 j 04:59	7° $\overline{32}$ '56	-1°-23'-12	opposition	-4390 Aug 23 j 02:57	25° $\overline{31}$ '44	-1°-55'-24
direct	-4398 Oct 21 j 11:49	6° $\overline{09}$ '50		direct	-4390 Nov 08 j 10:37	24° $\overline{08}$ '08	
conjunction	-4397 Jan 31 j 15:50	8° $\overline{37}$ '59	-1°-19'-54	conjunction	-4389 Feb 19 j 02:26	26° $\overline{37}$ '00	-1°-49'-26
minimum elong	-4397 Jan 31 j 15:49	8° $\overline{37}$ '59	1°20'07	minimum elong	-4389 Feb 19 j 02:26	26° $\overline{37}$ '00	1°49'38
max. Earth dist.	-4397 Feb 01 j 18:13	8° $\overline{40}$ '28	30.87943 AU	max. Earth dist.	-4389 Feb 20 j 00:46	26° $\overline{39}$ '06	30.83236 AU
retrograde	-4397 May 19 j 07:46	11° $\overline{12}$ '56		retrograde	-4389 Jun 06 j 19:23	29° $\overline{11}$ '51	
opposition	-4397 Aug 07 j 16:45	9° $\overline{47}$ '34	-1°-27'-44	opposition	-4389 Aug 25 j 14:22	27° $\overline{46}$ '19	-1°-58'-42
min. Earth dist.	-4397 Aug 06 j 16:23	9° $\overline{49}$ '17	28.87848 AU	min. Earth dist.	-4389 Aug 24 j 18:34	27° $\overline{47}$ '43	28.83136 AU
direct	-4397 Oct 23 j 23:44	8° $\overline{24}$ '28		direct	-4389 Nov 10 j 20:27	26° $\overline{22}$ '40	
conjunction	-4396 Feb 03 j 04:49	10° $\overline{52}$ '45	-1°-24'-4	conjunction	-4388 Feb 21 j 16:09	28° $\overline{51}$ '37	-1°-52'-26
minimum elong	-4396 Feb 03 j 04:49	10° $\overline{52}$ '45	1°24'18	minimum elong	-4388 Feb 21 j 16:08	28° $\overline{51}$ '37	1°52'39
max. Earth dist.	-4396 Feb 04 j 05:53	10° $\overline{55}$ '06	30.87564 AU	max. Earth dist.	-4388 Feb 22 j 14:46	28° $\overline{53}$ '44	30.82798 AU
retrograde	-4396 May 20 j 21:29	13° $\overline{27}$ '45			-4388 Mar 24 j 02:10	0° \approx	
min. Earth dist.	-4396 Aug 08 j 05:37	12° $\overline{04}$ '02	28.87454 AU	retrograde	-4388 Jun 08 j 07:36	1° \approx 26'25	
opposition	-4396 Aug 09 j 04:45	12° $\overline{02}$ '25	-1°-32'-8	min. Earth dist.	-4388 Aug 26 j 05:08	0° \approx 02'22	28.82768 AU
direct	-4396 Oct 25 j 09:54	10° $\overline{39}$ '18		opposition	-4388 Aug 27 j 01:40	0° \approx 00'55	-2°-1'-49
conjunction	-4395 Feb 04 j 18:05	13° $\overline{07}$ '41	-1°-28'-8		-4388 Aug 27 j 14:31	30° \overline{R} $\overline{3}$	
minimum elong	-4395 Feb 04 j 18:04	13° $\overline{07}$ '41	1°28'21	direct	-4388 Nov 12 j 08:44	28° $\overline{37}$ '11	
max. Earth dist.	-4395 Feb 05 j 19:44	13° $\overline{10}$ '06	30.87117 AU		-4387 Jan 23 j 19:39	0° \approx	
retrograde	-4395 May 23 j 10:34	15° $\overline{42}$ '43		conjunction	-4387 Feb 23 j 05:40	1° \approx 06'15	-1°-55'-16
opposition	-4395 Aug 11 j 16:34	14° $\overline{17}$ '23	-1°-36'-24	minimum elong	-4387 Feb 23 j 05:40	1° \approx 06'15	1°55'28
min. Earth dist.	-4395 Aug 10 j 17:30	14° $\overline{19}$ '01	28.86960 AU	max. Earth dist.	-4387 Feb 24 j 03:07	1° \approx 08'15	30.82492 AU
direct	-4395 Oct 27 j 22:15	12° $\overline{54}$ '14		retrograde	-4387 Jun 10 j 20:05	3° \approx 41'02	
conjunction	-4394 Feb 07 j 07:18	15° $\overline{22}$ '43	-1°-32'-3	opposition	-4387 Aug 29 j 13:04	2° \approx 15'33	-2°-4'-44
minimum elong	-4394 Feb 07 j 07:18	15° $\overline{22}$ '43	1°32'16	min. Earth dist.	-4387 Aug 28 j 17:32	2° \approx 16'56	28.82545 AU
max. Earth dist.	-4394 Feb 08 j 07:17	15° $\overline{24}$ '59	30.86573 AU	direct	-4387 Nov 14 j 18:24	0° \approx 51'48	
retrograde	-4394 May 26 j 01:15	17° $\overline{57}$ '46		conjunction	-4386 Feb 25 j 19:30	3° \approx 20'59	-1°-57'-55
min. Earth dist.	-4394 Aug 13 j 06:11	16° $\overline{33}$ '59	28.86373 AU	minimum elong	-4386 Feb 25 j 19:30	3° \approx 20'59	1°58'07
opposition	-4394 Aug 14 j 04:30	16° $\overline{32}$ '25	-1°-40'-31	max. Earth dist.	-4386 Feb 26 j 17:44	3° \approx 23'04	30.82334 AU
direct	-4394 Oct 30 j 08:50	15° $\overline{09}$ '11		retrograde	-4386 Jun 13 j 08:44	5° \approx 55'45	
conjunction	-4393 Feb 09 j 20:42	17° $\overline{37}$ '46	-1°-35'-50	min. Earth dist.	-4386 Aug 31 j 04:39	4° \approx 31'42	28.82444 AU
minimum elong	-4393 Feb 09 j 20:42	17° $\overline{37}$ '46	1°36'03	opposition	-4386 Sep 01 j 00:17	4° \approx 30'19	-2°-7'-28
max. Earth dist.	-4393 Feb 10 j 21:05	17° $\overline{40}$ '04	30.85926 AU	direct	-4386 Nov 17 j 06:02	3° \approx 06'32	
retrograde	-4393 May 28 j 14:45	20° $\overline{12}$ '48		conjunction	-4385 Feb 28 j 09:18	5° \approx 35'51	-2°00'-23
opposition	-4393 Aug 16 j 16:19	18° $\overline{47}$ '24	-1°-44'-29	minimum elong	-4385 Feb 28 j 09:18	5° \approx 35'51	2°00'35
min. Earth dist.	-4393 Aug 15 j 18:44	18° $\overline{48}$ '55	28.85685 AU	max. Earth dist.	-4385 Mar 01 j 06:00	5° \approx 37'47	30.82283 AU
direct	-4393 Nov 01 j 22:35	17° $\overline{24}$ '06		retrograde	-4385 Jun 15 j 22:56	8° \approx 10'37	
conjunction	-4392 Feb 12 j 10:08	19° $\overline{52}$ '44	-1°-39'-28	opposition	-4385 Sep 03 j 11:37	6° \approx 45'14	-2°-10'-1
				min. Earth dist.	-4385 Sep 02 j 16:46	6° \approx 46'34	28.82434 AU
				direct	-4385 Nov 19 j 16:20	5° \approx 21'26	

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Attention, astronomical year style is used: The year -4384 in astronomical counting style is the year 4385 BCE in historical counting style.

conjunction	-4384 Mar 01 j 23:29	7° \approx 50'55	-2°-2'-40	conjunction	-4376 Mar 20 j 18:05	25° \approx 53'07	-2°-14'-1
minimum elong	-4384 Mar 01 j 23:29	7° \approx 50'55	2°02'52	minimum elong	-4376 Mar 20 j 18:05	25° \approx 53'07	2°14'10
max. Earth dist.	-4384 Mar 02 j 20:34	7° \approx 52'53	30.82279 AU	max. Earth dist.	-4376 Mar 21 j 07:24	25° \approx 54'22	30.81212 AU
retrograde	-4384 Jun 17 j 12:09	10° \approx 25'40		retrograde	-4376 Jul 05 j 19:21	28° \approx 27'11	
opposition	-4384 Sep 04 j 22:47	9° \approx 00'21	-2°-12'-22	opposition	-4376 Sep 22 j 15:15	27° \approx 02'03	-2°-23'-37
min. Earth dist.	-4384 Sep 04 j 04:52	9° \approx 01'37	28.82435 AU	min. Earth dist.	-4376 Sep 22 j 03:09	27° \approx 02'55	28.81432 AU
direct	-4384 Nov 21 j 05:18	7° \approx 36'32		direct	-4376 Dec 09 j 02:01	25° \approx 37'40	
conjunction	-4383 Mar 04 j 13:38	10° \approx 06'10	-2°-4'-46	conjunction	-4375 Mar 23 j 08:32	28° \approx 08'05	-2°-14'-32
minimum elong	-4383 Mar 04 j 13:38	10° \approx 06'10	2°04'57	minimum elong	-4375 Mar 23 j 08:32	28° \approx 08'05	2°14'39
max. Earth dist.	-4383 Mar 05 j 08:57	10° \approx 07'58	30.82274 AU	max. Earth dist.	-4375 Mar 23 j 22:23	28° \approx 09'23	30.81337 AU
retrograde	-4383 Jun 20 j 02:51	12° \approx 40'53			-4375 May 18 j 01:23	0° \approx	
opposition	-4383 Sep 07 j 10:04	11° \approx 15'38	-2°-14'-30	retrograde	-4375 Jul 08 j 06:49	0° \approx 42'02	
min. Earth dist.	-4383 Sep 06 j 16:24	11° \approx 16'52	28.82413 AU		-4375 Aug 29 j 15:15	30° \approx	
direct	-4383 Nov 23 j 17:14	9° \approx 51'47		opposition	-4375 Sep 25 j 02:06	29° \approx 16'56	-2°-24'-4
conjunction	-4382 Mar 07 j 03:50	12° \approx 21'33	-2°-6'-41	min. Earth dist.	-4375 Sep 24 j 14:37	29° \approx 17'45	28.81633 AU
minimum elong	-4382 Mar 07 j 03:50	12° \approx 21'33	2°06'52	direct	-4375 Dec 11 j 14:40	27° \approx 52'31	
max. Earth dist.	-4382 Mar 07 j 22:49	12° \approx 23'19	30.82203 AU		-4374 Mar 15 j 15:22	0° \approx	
retrograde	-4382 Jun 22 j 15:43	14° \approx 56'13		conjunction	-4374 Mar 25 j 22:45	0° \approx 23'02	-2°-14'-50
opposition	-4382 Sep 09 j 21:26	13° \approx 31'00	-2°-16'-26	minimum elong	-4374 Mar 25 j 22:45	0° \approx 23'02	2°14'58
min. Earth dist.	-4382 Sep 09 j 05:25	13° \approx 32'08	28.82305 AU	max. Earth dist.	-4374 Mar 26 j 11:01	0° \approx 24'11	30.81626 AU
direct	-4382 Nov 26 j 05:07	12° \approx 07'07		retrograde	-4374 Jul 10 j 20:43	2° \approx 56'53	
conjunction	-4381 Mar 09 j 18:16	14° \approx 36'59	-2°-8'-24	opposition	-4374 Sep 27 j 12:51	1° \approx 31'51	-2°-24'-16
minimum elong	-4381 Mar 09 j 18:16	14° \approx 36'59	2°08'34	min. Earth dist.	-4374 Sep 27 j 01:24	1° \approx 32'40	28.81995 AU
max. Earth dist.	-4381 Mar 10 j 11:59	14° \approx 38'39	30.82061 AU	direct	-4374 Dec 14 j 02:07	0° \approx 07'23	
	-4381 Mar 20 j 00:42	15° \approx		conjunction	-4373 Mar 28 j 13:20	2° \approx 38'02	-2°-14'-56
retrograde	-4381 Jun 25 j 06:48	17° \approx 11'35		minimum elong	-4373 Mar 28 j 13:20	2° \approx 38'02	2°15'03
opposition	-4381 Sep 12 j 08:30	15° \approx 46'23	-2°-18'-10	max. Earth dist.	-4373 Mar 29 j 01:35	2° \approx 39'10	30.82046 AU
min. Earth dist.	-4381 Sep 11 j 16:31	15° \approx 47'31	28.82121 AU	retrograde	-4373 Jul 13 j 09:01	5° \approx 11'46	
	-4381 Oct 11 j 04:40	15° \approx		opposition	-4373 Sep 29 j 23:34	3° \approx 46'49	-2°-24'-16
direct	-4381 Nov 28 j 17:59	14° \approx 22'26		min. Earth dist.	-4373 Sep 29 j 13:36	3° \approx 47'32	28.82467 AU
	-4380 Jan 15 j 02:28	15° \approx		direct	-4373 Dec 16 j 14:05	2° \approx 22'21	
conjunction	-4380 Mar 11 j 08:42	16° \approx 52'25	-2°-9'-55	conjunction	-4372 Mar 30 j 03:58	4° \approx 53'06	-2°-14'-49
minimum elong	-4380 Mar 11 j 08:42	16° \approx 52'25	2°10'06	minimum elong	-4372 Mar 30 j 03:58	4° \approx 53'07	2°14'57
max. Earth dist.	-4380 Mar 12 j 01:18	16° \approx 53'58	30.81837 AU	max. Earth dist.	-4372 Mar 30 j 14:58	4° \approx 54'08	30.82571 AU
retrograde	-4380 Jun 26 j 19:06	19° \approx 26'55		retrograde	-4372 Jul 14 j 23:52	7° \approx 26'45	
opposition	-4380 Sep 13 j 19:44	18° \approx 01'44	-2°-19'-41	opposition	-4372 Oct 01 j 10:16	6° \approx 01'53	-2°-24'-2
min. Earth dist.	-4380 Sep 13 j 05:37	18° \approx 02'44	28.81883 AU	min. Earth dist.	-4372 Oct 01 j 00:16	6° \approx 02'35	28.83012 AU
direct	-4380 Nov 30 j 04:42	16° \approx 37'42		direct	-4372 Dec 18 j 03:22	4° \approx 37'24	
conjunction	-4379 Mar 13 j 23:01	19° \approx 07'45	-2°-11'-15	conjunction	-4371 Apr 01 j 18:30	7° \approx 08'17	-2°-14'-31
minimum elong	-4379 Mar 13 j 23:01	19° \approx 07'45	2°11'24	minimum elong	-4371 Apr 01 j 18:30	7° \approx 08'17	2°14'37
max. Earth dist.	-4379 Mar 14 j 15:17	19° \approx 09'17	30.81595 AU	max. Earth dist.	-4371 Apr 02 j 04:36	7° \approx 09'14	30.83117 AU
retrograde	-4379 Jun 29 j 07:11	21° \approx 42'09		retrograde	-4371 Jul 17 j 12:00	9° \approx 41'50	
opposition	-4379 Sep 16 j 06:40	20° \approx 16'58	-2°-21'00	opposition	-4371 Oct 03 j 21:08	8° \approx 17'03	-2°-23'-35
min. Earth dist.	-4379 Sep 15 j 16:19	20° \approx 18'00	28.81642 AU	min. Earth dist.	-4371 Oct 03 j 13:07	8° \approx 17'37	28.83557 AU
direct	-4379 Dec 02 j 17:42	18° \approx 52'51		direct	-4371 Dec 20 j 14:42	6° \approx 52'33	
conjunction	-4378 Mar 16 j 13:18	21° \approx 22'59	-2°-12'-22	conjunction	-4370 Apr 04 j 09:20	9° \approx 23'33	-2°-13'-59
minimum elong	-4378 Mar 16 j 13:18	21° \approx 22'59	2°12'32	minimum elong	-4370 Apr 04 j 09:20	9° \approx 23'33	2°14'06
max. Earth dist.	-4378 Mar 17 j 03:59	21° \approx 24'22	30.81373 AU	max. Earth dist.	-4370 Apr 04 j 18:34	9° \approx 24'25	30.83646 AU
retrograde	-4378 Jul 01 j 19:22	23° \approx 57'17		retrograde	-4370 Jul 20 j 01:27	11° \approx 56'58	
opposition	-4378 Sep 18 j 17:38	22° \approx 32'06	-2°-22'-5	opposition	-4370 Oct 06 j 07:47	10° \approx 32'16	-2°-22'-55
min. Earth dist.	-4378 Sep 18 j 04:41	22° \approx 33'01	28.81465 AU	min. Earth dist.	-4370 Oct 05 j 23:56	10° \approx 32'50	28.84046 AU
direct	-4378 Dec 05 j 03:34	21° \approx 07'53		direct	-4370 Dec 23 j 03:42	9° \approx 07'44	
conjunction	-4377 Mar 19 j 03:46	23° \approx 38'07	-2°-13'-18	conjunction	-4369 Apr 07 j 00:10	11° \approx 38'50	-2°-13'-16
minimum elong	-4377 Mar 19 j 03:46	23° \approx 38'07	2°13'26	minimum elong	-4369 Apr 07 j 00:10	11° \approx 38'50	2°13'21
max. Earth dist.	-4377 Mar 19 j 18:49	23° \approx 39'31	30.81237 AU	max. Earth dist.	-4369 Apr 07 j 07:19	11° \approx 39'30	30.84092 AU
retrograde	-4377 Jul 04 j 07:10	26° \approx 12'16		retrograde	-4369 Jul 22 j 14:25	14° \approx 12'07	
opposition	-4377 Sep 21 j 04:28	24° \approx 47'07	-2°-22'-58	opposition	-4369 Oct 08 j 18:39	12° \approx 47'29	-2°-22'-2
min. Earth dist.	-4377 Sep 20 j 15:37	24° \approx 48'02	28.81377 AU	min. Earth dist.	-4369 Oct 08 j 12:38	12° \approx 47'54	28.84451 AU
direct	-4377 Dec 07 j 15:16	23° \approx 22'49		direct	-4369 Dec 25 j 14:20	11° \approx 22'54	

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Attention, astronomical year style is used: The year -4368 in astronomical counting style is the year 4369 BCE in historical counting style.

conjunction	-4368 Apr 08 j 15:04	13° ✕ 54'05	-2°-12'-20	conjunction	-4360 Apr 27 j 11:41	1° ° 52'22	-1°-57'-54
minimum elong	-4368 Apr 08 j 15:04	13° ✕ 54'05	2°12'25	minimum elong	-4360 Apr 27 j 11:42	1° ° 52'22	1°57'55
max. Earth dist.	-4368 Apr 08 j 21:51	13° ✕ 54'43	30.84455 AU	max. Earth dist.	-4360 Apr 27 j 10:14	1° ° 52'14	30.88354 AU
retrograde	-4368 Jul 24 j 01:53	16° ✕ 27'13		retrograde	-4360 Aug 11 j 03:45	4° ° 24'16	
opposition	-4368 Oct 10 j 05:18	15° ° 02'37	-2°-20'-55	opposition	-4360 Oct 27 j 17:18	3° ° 00'10	-2°-4'-40
min. Earth dist.	-4368 Oct 09 j 23:53	15° ° 03'00	28.84765 AU	min. Earth dist.	-4360 Oct 27 j 18:42	3° ° 00'04	28.88929 AU
direct	-4368 Dec 27 j 02:44	13° ✕ 37'58		direct	-4359 Jan 14 j 03:57	1° ° 35'11	
conjunction	-4367 Apr 11 j 05:45	16° ✕ 09'13	-2°-11'-12	conjunction	-4359 Apr 30 j 02:15	4° ° 07'06	-1°-55'-15
minimum elong	-4367 Apr 11 j 05:45	16° ✕ 09'13	2°11'16	minimum elong	-4359 Apr 30 j 02:15	4° ° 07'06	1°55'15
max. Earth dist.	-4367 Apr 11 j 10:17	16° ✕ 09'39	30.84752 AU	max. Earth dist.	-4359 Apr 30 j 00:36	4° ° 06'57	30.89260 AU
retrograde	-4367 Jul 26 j 13:37	18° ✕ 42'12		retrograde	-4359 Aug 13 j 14:56	6° ° 38'51	
opposition	-4367 Oct 12 j 15:58	17° ✕ 17'39	-2°-19'-37	opposition	-4359 Oct 30 j 03:41	5° ° 14'53	-2°-1'-44
min. Earth dist.	-4367 Oct 12 j 11:44	17° ✕ 17'57	28.85049 AU	min. Earth dist.	-4359 Oct 30 j 05:36	5° ° 14'44	28.89824 AU
direct	-4367 Dec 29 j 13:48	15° ✕ 52'55		direct	-4358 Jan 16 j 16:29	3° ° 49'54	
conjunction	-4366 Apr 13 j 20:28	18° ✕ 24'14	-2°-9'-53	conjunction	-4358 May 02 j 16:41	6° ° 21'54	-1°-52'-25
minimum elong	-4366 Apr 13 j 20:29	18° ✕ 24'15	2°09'57	minimum elong	-4358 May 02 j 16:41	6° ° 21'54	1°52'25
max. Earth dist.	-4366 Apr 14 j 01:07	18° ✕ 24'40	30.85028 AU	max. Earth dist.	-4358 May 02 j 12:49	6° ° 21'32	30.90148 AU
retrograde	-4366 Jul 29 j 00:11	20° ✕ 57'03		retrograde	-4358 Aug 16 j 02:43	8° ° 53'31	
opposition	-4366 Oct 15 j 02:34	19° ° 32'32	-2°-18'-5	opposition	-4358 Nov 01 j 14:13	7° ° 29'38	-1°-58'-37
min. Earth dist.	-4366 Oct 14 j 23:28	19° ° 32'45	28.85319 AU	min. Earth dist.	-4358 Nov 01 j 17:25	7° ° 29'25	28.90684 AU
direct	-4365 Jan 01 j 02:24	18° ✕ 07'44		direct	-4357 Jan 19 j 03:31	6° ° 04'39	
conjunction	-4365 Apr 16 j 11:07	20° ✕ 39'07	-2°-8'-21	conjunction	-4357 May 05 j 07:23	8° ° 36'43	-1°-49'-25
minimum elong	-4365 Apr 16 j 11:07	20° ✕ 39'07	2°08'24	minimum elong	-4357 May 05 j 07:24	8° ° 36'43	1°49'24
max. Earth dist.	-4365 Apr 16 j 13:39	20° ° 39'21	30.85326 AU	max. Earth dist.	-4357 May 05 j 03:21	8° ° 36'20	30.90962 AU
retrograde	-4365 Jul 31 j 13:08	23° ✕ 11'46		retrograde	-4357 Aug 18 j 13:07	11° ° 08'10	
opposition	-4365 Oct 17 j 12:58	21° ✕ 47'17	-2°-16'-22	opposition	-4357 Nov 04 j 00:43	9° ° 44'22	-1°-55'-19
min. Earth dist.	-4365 Oct 17 j 10:10	21° ° 47'29	28.85645 AU	min. Earth dist.	-4357 Nov 04 j 05:18	9° ° 44'03	28.91438 AU
direct	-4364 Jan 03 j 13:52	20° ✕ 22'24		direct	-4356 Jan 21 j 15:29	8° ° 19'21	
conjunction	-4364 Apr 18 j 01:49	22° ✕ 53'52	-2°-6'-39	conjunction	-4356 May 06 j 21:51	10° ° 51'28	-1°-46'-16
minimum elong	-4364 Apr 18 j 01:49	22° ✕ 53'52	2°06'42	minimum elong	-4356 May 06 j 21:52	10° ° 51'28	1°46'15
max. Earth dist.	-4364 Apr 18 j 04:18	22° ✕ 54'06	30.85686 AU	max. Earth dist.	-4356 May 06 j 15:23	10° ° 50'52	30.91678 AU
retrograde	-4364 Aug 02 j 00:12	25° ✕ 26'21		retrograde	-4356 Aug 20 j 01:26	13° ° 22'45	
opposition	-4364 Oct 18 j 23:33	24° ✕ 01'55	-2°-14'-25	opposition	-4356 Nov 05 j 11:14	11° ° 59'01	-1°-51'-52
min. Earth dist.	-4364 Oct 18 j 22:13	24° ✕ 02'00	28.86052 AU	min. Earth dist.	-4356 Nov 05 j 16:19	11° ° 58'39	28.92102 AU
direct	-4363 Jan 05 j 02:21	22° ✕ 36'59		direct	-4355 Jan 23 j 02:38	10° ° 33'56	
conjunction	-4363 Apr 20 j 16:09	25° ✕ 08'31	-2°-4'-44	conjunction	-4355 May 09 j 12:14	13° ° 06'05	-1°-42'-57
minimum elong	-4363 Apr 20 j 16:09	25° ✕ 08'31	2°04'47	minimum elong	-4355 May 09 j 12:15	13° ° 06'05	1°42'55
max. Earth dist.	-4363 Apr 20 j 17:20	25° ° 08'38	30.86164 AU	max. Earth dist.	-4355 May 09 j 05:27	13° ° 05'27	30.92295 AU
retrograde	-4363 Aug 04 j 13:48	27° ✕ 40'51		retrograde	-4355 Aug 22 j 10:54	15° ° 37'11	
opposition	-4363 Oct 21 j 09:59	26° ° 16'28	-2°-12'-17	opposition	-4355 Nov 07 j 21:47	14° ° 13'29	-1°-48'-14
min. Earth dist.	-4363 Oct 21 j 08:21	26° ° 16'35	28.86588 AU	min. Earth dist.	-4355 Nov 08 j 04:41	14° ° 12'59	28.92672 AU
direct	-4362 Jan 07 j 16:07	24° ✕ 51'30		direct	-4354 Jan 25 j 15:33	12° ° 48'20	
conjunction	-4362 Apr 23 j 06:41	27° ✕ 23'07	-2°-2'-39	conjunction	-4354 May 12 j 02:34	15° ° 20'30	-1°-39'-29
minimum elong	-4362 Apr 23 j 06:42	27° ✕ 23'07	2°02'42	minimum elong	-4354 May 12 j 02:35	15° ° 20'30	1°39'28
max. Earth dist.	-4362 Apr 23 j 07:20	27° ✕ 23'10	30.86766 AU	max. Earth dist.	-4354 May 11 j 17:54	15° ° 19'42	30.92851 AU
retrograde	-4362 Aug 07 j 01:11	29° ✕ 55'18		retrograde	-4354 Aug 24 j 23:08	17° ° 51'23	
opposition	-4362 Oct 23 j 20:26	28° ✕ 30'59	-2°-9'-57	opposition	-4354 Nov 10 j 08:00	16° ° 27'43	-1°-44'-27
min. Earth dist.	-4362 Oct 23 j 20:30	28° ✕ 30'59	28.87260 AU	min. Earth dist.	-4354 Nov 10 j 15:01	16° ° 27'13	28.93198 AU
direct	-4361 Jan 10 j 03:47	27° ✕ 06'00		direct	-4353 Jan 28 j 05:14	15° ° 02'29	
conjunction	-4361 Apr 25 j 21:16	29° ✕ 37'43	-2°00'-22	conjunction	-4353 May 14 j 16:55	17° ° 34'41	-1°-35'-52
minimum elong	-4361 Apr 25 j 21:17	29° ✕ 37'43	2°00'23	minimum elong	-4353 May 14 j 16:56	17° ° 34'41	1°35'50
max. Earth dist.	-4361 Apr 25 j 21:15	29° ✕ 37'43	30.87514 AU	max. Earth dist.	-4353 May 14 j 07:34	17° ° 33'49	30.93368 AU
retrograde	-4361 May 05 j 21:24	0° °		retrograde	-4353 Aug 27 j 09:38	20° ° 05'22	
opposition	-4361 Aug 09 j 14:35	2° ° 09'44		opposition	-4353 Nov 12 j 18:28	18° ° 41'43	-1°-40'-32
min. Earth dist.	-4361 Oct 26 j 06:49	0° ° 45'32	-2°-7'-24	min. Earth dist.	-4353 Nov 13 j 03:22	18° ° 41'05	28.93719 AU
direct	-4361 Nov 23 j 09:39	30° °		direct	-4352 Jan 30 j 17:13	17° ° 16'25	
conjunction	-4360 Jan 12 j 16:59	29° ✕ 20'33		conjunction	-4352 May 16 j 06:56	19° ° 48'36	-1°-32'-8
minimum elong	-4360 Mar 02 j 00:30	0° °		minimum elong	-4352 May 16 j 06:57	19° ° 48'37	1°32'05
max. Earth dist.				max. Earth dist.	-4352 May 15 j 20:49	19° ° 47'40	30.93915 AU

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Attention, astronomical year style is used: The year -4352 in astronomical counting style is the year 4353 BCE in historical counting style.

retrograde	-4352 Aug 28 j 21:55	22°♊19°05		retrograde	-4344 Sep 15 j 13:13	10°♊05°56	
opposition	-4352 Nov 14 j 04:43	20°♊55°28	-1°-36'-27	opposition	-4344 Dec 01 j 15:40	8°♊43°00	0°-59'-14
min. Earth dist.	-4352 Nov 14 j 13:25	20°♊54°51	28.94285 AU	min. Earth dist.	-4344 Dec 02 j 07:00	8°♊41°55	29.01878 AU
direct	-4351 Feb 01 j 07:26	19°♊30°07		direct	-4343 Feb 19 j 06:18	7°♊17°38	
conjunction	-4351 May 18 j 20:51	22°♊02°19	-1°-28'-15	conjunction	-4343 Jun 06 j 10:15	9°♊50°10	0°-53°00
minimum elong	-4351 May 18 j 20:52	22°♊02°19	1°28'12	minimum elong	-4343 Jun 06 j 10:15	9°♊50°10	0°52'54
max. Earth dist.	-4351 May 18 j 09:34	22°♊01°16	30.94525 AU	max. Earth dist.	-4343 Jun 05 j 16:47	9°♊48°33	31.02270 AU
retrograde	-4351 Aug 31 j 09:49	24°♊32°36		retrograde	-4343 Sep 18 j 01:14	12°♊19°17	
opposition	-4351 Nov 16 j 15:01	23°♊09°01	-1°-32'-14	opposition	-4343 Dec 04 j 02:01	10°♊56°25	0°-54'-7
min. Earth dist.	-4351 Nov 17 j 00:59	23°♊08°18	28.94956 AU	min. Earth dist.	-4343 Dec 04 j 17:22	10°♊55°20	29.02715 AU
direct	-4350 Feb 03 j 19:26	21°♊43°36		direct	-4342 Feb 21 j 20:44	9°♊31°02	
conjunction	-4350 May 21 j 10:45	24°♊15°50	-1°-24'-14	conjunction	-4342 Jun 08 j 23:38	12°♊03°34	0°-48'-11
minimum elong	-4350 May 21 j 10:46	24°♊15°50	1°24'11	minimum elong	-4342 Jun 08 j 23:39	12°♊03°34	0°48'04
max. Earth dist.	-4350 May 20 j 23:30	24°♊14°47	30.95261 AU	max. Earth dist.	-4342 Jun 08 j 04:51	12°♊01°50	31.03063 AU
retrograde	-4350 Sep 02 j 20:23	26°♊45°56		retrograde	-4342 Sep 20 j 13:01	14°♊32°32	
opposition	-4350 Nov 19 j 01:18	25°♊22°25	-1°-27'-53	opposition	-4342 Dec 06 j 12:32	13°♊09°42	0°-48'-56
min. Earth dist.	-4350 Nov 19 j 11:23	25°♊21°42	28.95739 AU	min. Earth dist.	-4342 Dec 07 j 05:22	13°♊08°31	29.03473 AU
direct	-4349 Feb 06 j 08:56	23°♊56°59		direct	-4341 Feb 24 j 09:27	11°♊44°17	
max. Earth dist.	-4349 May 23 j 11:37	26°♊28°02	30.96120 AU	conjunction	-4341 Jun 11 j 12:54	14°♊16°48	0°-43'-18
conjunction	-4349 May 24 j 00:31	26°♊29°14	-1°-20'-6	minimum elong	-4341 Jun 11 j 12:55	14°♊16°48	0°43'11
minimum elong	-4349 May 24 j 00:31	26°♊29°14	1°20'02	max. Earth dist.	-4341 Jun 10 j 17:55	14°♊15°02	31.03794 AU
retrograde	-4349 Sep 05 j 07:53	28°♊59°11			-4341 Jul 01 j 03:28	15°♊	
opposition	-4349 Nov 21 j 11:35	27°♊35°45	-1°-23'-23	retrograde	-4341 Sep 22 j 23:04	16°♊45°35	
min. Earth dist.	-4349 Nov 21 j 22:19	27°♊34°59	28.96668 AU	opposition	-4341 Dec 08 j 22:58	15°♊22°47	0°-43'-40
direct	-4348 Feb 08 j 19:58	26°♊10°19		min. Earth dist.	-4341 Dec 09 j 16:08	15°♊21°35	29.04172 AU
conjunction	-4348 May 25 j 14:20	28°♊42°37	-1°-15'-51		-4341 Dec 22 j 15:05	15°♊	
minimum elong	-4348 May 25 j 14:21	28°♊42°37	1°15'47	direct	-4340 Feb 26 j 23:28	13°♊57°20	
max. Earth dist.	-4348 May 25 j 01:59	28°♊41°28	30.97115 AU		-4340 May 01 j 00:47	15°♊	
	-4348 Jun 30 j 22:33	0°♊		max. Earth dist.	-4340 Jun 12 j 05:21	16°♊27°55	31.04496 AU
retrograde	-4348 Sep 06 j 18:00	1°♊12°25		conjunction	-4340 Jun 13 j 01:56	16°♊29°49	0°-38'-21
	-4348 Nov 16 j 11:15	30°♊		minimum elong	-4340 Jun 13 j 01:56	16°♊29°49	0°38'14
opposition	-4348 Nov 22 j 21:58	29°♊49°05	-1°-18'-47	retrograde	-4340 Sep 24 j 10:40	18°♊58°25	
min. Earth dist.	-4348 Nov 23 j 09:34	29°♊48°16	28.97703 AU	opposition	-4340 Dec 10 j 09:25	17°♊35°40	0°-38'-22
direct	-4347 Feb 10 j 07:42	28°♊23°41		min. Earth dist.	-4340 Dec 11 j 03:11	17°♊34°25	29.04891 AU
	-4347 May 02 j 10:24	0°♊		direct	-4339 Feb 28 j 11:22	16°♊10°10	
conjunction	-4347 May 28 j 03:48	0°♊56°02	-1°-11'-29	conjunction	-4339 Jun 15 j 14:47	18°♊42°37	0°-33'-22
minimum elong	-4347 May 28 j 03:48	0°♊56°02	1°11'24	minimum elong	-4339 Jun 15 j 14:48	18°♊42°37	0°33'14
max. Earth dist.	-4347 May 27 j 13:41	0°♊54°43	30.98203 AU	max. Earth dist.	-4339 Jun 14 j 18:53	18°♊40°46	31.05232 AU
retrograde	-4347 Sep 09 j 05:48	3°♊25°42		retrograde	-4339 Sep 26 j 20:19	21°♊11°09	
opposition	-4347 Nov 25 j 08:15	2°♊02°29	-1°-14'-3	opposition	-4339 Dec 12 j 19:54	19°♊48°19	0°-33°00
min. Earth dist.	-4347 Nov 25 j 19:59	2°♊01°40	28.98811 AU	min. Earth dist.	-4339 Dec 13 j 14:27	19°♊47°01	29.05648 AU
direct	-4346 Feb 12 j 18:24	0°♊37°06		direct	-4338 Mar 03 j 00:26	18°♊22°47	
conjunction	-4346 May 30 j 17:35	3°♊09°31	-1°-7°00	max. Earth dist.	-4338 Jun 17 j 06:08	20°♊53°13	31.06038 AU
minimum elong	-4346 May 30 j 17:36	3°♊09°31	1°06°55	conjunction	-4338 Jun 18 j 03:31	20°♊55°12	0°-28'-20
max. Earth dist.	-4346 May 30 j 03:33	3°♊08°13	30.99313 AU	minimum elong	-4338 Jun 18 j 03:31	20°♊55°12	0°28'12
retrograde	-4346 Sep 11 j 14:58	5°♊39°04		retrograde	-4338 Sep 29 j 06:54	23°♊23°28	
opposition	-4346 Nov 27 j 18:38	4°♊15°58	-1°-9'-12	opposition	-4338 Dec 15 j 06:13	22°♊00°46	0°-27'-36
min. Earth dist.	-4346 Nov 28 j 08:05	4°♊15°01	28.99905 AU	min. Earth dist.	-4338 Dec 16 j 00:26	21°♊59°30	29.06510 AU
direct	-4345 Feb 15 j 06:26	2°♊50°36		direct	-4337 Mar 05 j 12:05	20°♊35°13	
conjunction	-4345 Jun 02 j 07:14	5°♊23°05	-1°-2'-25	conjunction	-4337 Jun 20 j 16:19	23°♊07°37	0°-23'-15
minimum elong	-4345 Jun 02 j 07:15	5°♊23°05	1°02°20	minimum elong	-4337 Jun 20 j 16:19	23°♊07°37	0°23'07
max. Earth dist.	-4345 Jun 01 j 15:23	5°♊21°36	31.00391 AU	max. Earth dist.	-4337 Jun 19 j 19:38	23°♊05°42	31.06955 AU
retrograde	-4345 Sep 14 j 03:00	7°♊52°30		retrograde	-4337 Oct 01 j 14:58	25°♊35°43	
opposition	-4345 Nov 30 j 05:04	6°♊29°29	-1°-4'-16	opposition	-4337 Dec 17 j 16:51	24°♊13°06	0°-22'-9
min. Earth dist.	-4345 Nov 30 j 18:30	6°♊28°33	29.00940 AU	min. Earth dist.	-4337 Dec 18 j 12:07	24°♊11°45	29.07491 AU
direct	-4344 Feb 17 j 19:04	5°♊04°08		direct	-4336 Mar 06 j 23:47	22°♊47°33	
conjunction	-4344 Jun 03 j 20:46	7°♊36°39	0°-57'-45	max. Earth dist.	-4336 Jun 21 j 06:59	25°♊17°55	31.08010 AU
minimum elong	-4344 Jun 03 j 20:46	7°♊36°39	0°57°39	conjunction	-4336 Jun 22 j 04:42	25°♊19°55	0°-18'-9
max. Earth dist.	-4344 Jun 03 j 04:22	7°♊35°07	31.01374 AU	minimum elong	-4336 Jun 22 j 04:41	25°♊19°55	0°18'01

Attention, astronomical year style is used: The year -4336 in astronomical counting style is the year 4337 BCE in historical counting style.

retrograde	-4336 Oct 03 j 02:07	27° 8 47'54		opposition	-4329 Jan 01 j 19:43	9° II 39'07	0°16'23
opposition	-4336 Dec 19 j 03:19	26° 8 25'21	0°-16'-41	min. Earth dist.	-4329 Jan 02 j 18:24	9° II 37'33	29.15012 AU
min. Earth dist.	-4336 Dec 19 j 21:50	26° 8 24'04	29.08599 AU	direct	-4329 Mar 23 j 14:41	8° II 13'45	
direct	-4335 Mar 09 j 11:16	24° 8 59'50					
				conjunction	-4329 Jul 08 j 19:01	10° II 46'03	0°17'58
conjunction	-4335 Jun 24 j 17:14	27° 8 32'12	0°-13'-2	minimum elong	-4329 Jul 08 j 19:01	10° II 46'03	0°18'09
minimum elong	-4335 Jun 24 j 17:15	27° 8 32'12	0°12'53	max. Earth dist.	-4329 Jul 07 j 17:30	10° II 43'40	31.15354 AU
behind sun begin	-4335 Jun 24 j 13:17	27° 8 31'51		retrograde	-4329 Oct 19 j 05:10	13° II 13'17	
behind sun end	-4335 Jun 24 j 21:12	27° 8 32'33		opposition	-4328 Jan 04 j 06:37	11° II 51'13	0°21'50
max. Earth dist.	-4335 Jun 23 j 19:45	27° 8 30'13	31.09165 AU	min. Earth dist.	-4328 Jan 05 j 05:02	11° II 49'39	29.15733 AU
	-4335 Oct 03 j 07:08	0° II		direct	-4328 Mar 25 j 02:53	10° II 25'50	
retrograde	-4335 Oct 05 j 11:32	0° II 00'05		max. Earth dist.	-4328 Jul 09 j 06:02	12° II 55'45	31.16027 AU
	-4335 Oct 07 j 16:19	30° R 8					
opposition	-4335 Dec 21 j 13:49	28° 8 37'37	0°-11'-11	conjunction	-4328 Jul 10 j 06:53	12° II 58'04	0°23'03
min. Earth dist.	-4335 Dec 22 j 09:47	28° 8 36'14	29.09795 AU	minimum elong	-4328 Jul 10 j 06:53	12° II 58'04	0°23'15
direct	-4334 Mar 11 j 21:37	27° 8 12'08		retrograde	-4328 Oct 20 j 13:13	15° II 25'12	
max. Earth dist.	-4334 Jun 26 j 07:42	29° 8 42'28	31.10385 AU	opposition	-4327 Jan 05 j 17:36	14° II 03'08	0°27'16
				min. Earth dist.	-4327 Jan 06 j 17:15	14° II 01'30	29.16381 AU
conjunction	-4334 Jun 27 j 05:44	29° 8 44'31	0°-7'-53	direct	-4327 Mar 27 j 15:00	12° II 37'45	
minimum elong	-4334 Jun 27 j 05:43	29° 8 44'31	0°07'44				
behind sun begin	-4334 Jun 26 j 23:49	29° 8 43'59		conjunction	-4327 Jul 12 j 18:31	15° II 09'55	0°28'06
behind sun end	-4334 Jun 27 j 11:37	29° 8 45'02		minimum elong	-4327 Jul 12 j 18:31	15° II 09'55	0°28'17
	-4334 Jul 04 j 04:16	0° II		max. Earth dist.	-4327 Jul 11 j 16:38	15° II 07'30	31.16662 AU
retrograde	-4334 Oct 07 j 22:43	2° II 12'17		retrograde	-4327 Oct 22 j 23:49	17° II 36'56	
opposition	-4334 Dec 24 j 00:24	0° II 49'55	0°-5'-40	opposition	-4326 Jan 08 j 04:16	16° II 14'53	0°32'38
min. Earth dist.	-4334 Dec 24 j 20:01	0° II 48'33	29.11004 AU	min. Earth dist.	-4326 Jan 09 j 03:11	16° II 13'18	29.17012 AU
	-4333 Jan 24 j 20:59	30° R 8		direct	-4326 Mar 30 j 02:35	14° II 49'29	
direct	-4333 Mar 14 j 11:31	29° 8 24'28		max. Earth dist.	-4326 Jul 14 j 04:41	17° II 19'13	31.17294 AU
	-4333 May 01 j 02:05	0° II					
				conjunction	-4326 Jul 15 j 06:11	17° II 21'35	0°33'06
conjunction	-4333 Jun 29 j 18:06	1° II 56'52	0°-2'-44	minimum elong	-4326 Jul 15 j 06:10	17° II 21'35	0°33'18
minimum elong	-4333 Jun 29 j 18:06	1° II 56'52	0°02'34	retrograde	-4326 Oct 25 j 08:36	19° II 48'31	
behind sun begin	-4333 Jun 29 j 11:34	1° II 56'17		opposition	-4325 Jan 10 j 15:19	18° II 26'29	0°37'58
behind sun end	-4333 Jun 30 j 00:39	1° II 57'26		min. Earth dist.	-4325 Jan 11 j 15:18	18° II 24'49	29.17678 AU
max. Earth dist.	-4333 Jun 28 j 19:19	1° II 54'45	31.11572 AU	direct	-4325 Apr 01 j 13:15	17° II 01'04	
retrograde	-4333 Oct 10 j 10:06	4° II 24'33					
opposition	-4333 Dec 26 j 11:12	3° II 02'15	0°00'-8	conjunction	-4325 Jul 17 j 17:30	19° II 33'06	0°38'03
min. Earth dist.	-4333 Dec 27 j 07:59	3° II 00'49	29.12174 AU	minimum elong	-4325 Jul 17 j 17:30	19° II 33'06	0°38'15
asc. node	-4332 Jan 05 j 06:29	2° II 45'57		max. Earth dist.	-4325 Jul 16 j 16:04	19° II 30'44	31.17994 AU
direct	-4332 Mar 15 j 23:12	1° II 36'51		retrograde	-4325 Oct 27 j 18:46	21° II 59'57	
max. Earth dist.	-4332 Jun 30 j 07:42	4° II 07'07	31.12699 AU	opposition	-4324 Jan 13 j 02:17	20° II 37'57	0°43'14
				min. Earth dist.	-4324 Jan 14 j 01:16	20° II 36'21	29.18419 AU
conjunction	-4332 Jul 01 j 06:31	4° II 09'14	0°02'34	direct	-4324 Apr 03 j 02:50	19° II 12'33	
minimum elong	-4332 Jul 01 j 06:30	4° II 09'14	0°02'45	max. Earth dist.	-4324 Jul 18 j 03:16	21° II 42'10	31.18781 AU
behind sun begin	-4332 Jun 30 j 23:59	4° II 08'39					
behind sun end	-4332 Jul 01 j 13:02	4° II 09'49		conjunction	-4324 Jul 19 j 04:49	21° II 44'33	0°42'57
retrograde	-4332 Oct 11 j 20:31	6° II 36'49		minimum elong	-4324 Jul 19 j 04:48	21° II 44'33	0°43'09
opposition	-4332 Dec 27 j 22:00	5° II 14'36	0°05'23	retrograde	-4324 Oct 29 j 05:42	24° II 11'20	
min. Earth dist.	-4332 Dec 28 j 19:03	5° II 13'08	29.13243 AU	opposition	-4323 Jan 14 j 13:17	22° II 49'21	0°48'26
direct	-4331 Mar 18 j 12:44	3° II 49'13		min. Earth dist.	-4323 Jan 15 j 12:42	22° II 47'44	29.19275 AU
				direct	-4323 Apr 05 j 13:24	21° II 24'00	
conjunction	-4331 Jul 03 j 18:40	6° II 21'35	0°07'43				
minimum elong	-4331 Jul 03 j 18:40	6° II 21'35	0°07'54	conjunction	-4323 Jul 21 j 16:02	23° II 55'58	0°47'47
behind sun begin	-4331 Jul 03 j 12:49	6° II 21'04		minimum elong	-4323 Jul 21 j 16:02	23° II 55'58	0°47'59
behind sun end	-4331 Jul 04 j 00:31	6° II 22'06		max. Earth dist.	-4323 Jul 20 j 15:15	23° II 53'39	31.19681 AU
max. Earth dist.	-4331 Jul 02 j 18:18	6° II 19'19	31.13707 AU	retrograde	-4323 Oct 31 j 15:41	26° II 22'42	
retrograde	-4331 Oct 14 j 08:31	8° II 49'04		opposition	-4322 Jan 17 j 00:20	25° II 00'47	0°53'34
opposition	-4331 Dec 30 j 08:51	7° II 26'54	0°10'53	min. Earth dist.	-4322 Jan 17 j 23:24	24° II 59'12	29.20199 AU
min. Earth dist.	-4331 Dec 31 j 06:31	7° II 25'24	29.14198 AU	direct	-4322 Apr 08 j 02:18	23° II 35'29	
direct	-4330 Mar 21 j 00:59	6° II 01'32		max. Earth dist.	-4322 Jul 23 j 01:31	26° II 05'02	31.20628 AU
max. Earth dist.	-4330 Jul 05 j 07:03	8° II 31'39	31.14590 AU				
				conjunction	-4322 Jul 24 j 03:08	26° II 07'25	0°52'33
conjunction	-4330 Jul 06 j 07:00	8° II 33'52	0°12'51	minimum elong	-4322 Jul 24 j 03:08	26° II 07'25	0°52'46
minimum elong	-4330 Jul 06 j 06:59	8° II 33'52	0°13'02	retrograde	-4322 Nov 03 j 04:05	28° II 34'07	
behind sun begin	-4330 Jul 06 j 03:06	8° II 33'32		opposition	-4321 Jan 19 j 11:24	27° II 12'16	0°58'37
behind sun end	-4330 Jul 06 j 10:52	8° II 34'13		min. Earth dist.	-4321 Jan 20 j 10:28	27° II 10'41	29.21168 AU
retrograde	-4330 Oct 16 j 18:17	11° II 01'14		direct	-4321 Apr 10 j 14:29	25° II 47'02	

Attention, astronomical year style is used: The year -4321 in astronomical counting style is the year 4322 BCE in historical counting style.

conjunction	-4321 Jul 26 j 14:21	28°II18'57	0°57'15	conjunction	-4313 Aug 13 j 03:54	15°☾48'57	1°31'09
minimum elong	-4321 Jul 26 j 14:21	28°II18'57	0°57'26	minimum elong	-4313 Aug 13 j 03:54	15°☾48'57	1°31'20
max. Earth dist.	-4321 Jul 25 j 13:51	28°II16'40	31.21585 AU	retrograde	-4313 Nov 22 j 22:45	18°☾15'16	
	-4321 Sep 14 j 01:46	0°☾		opposition	-4312 Feb 08 j 18:26	16°☾53'26	1°39'20
retrograde	-4321 Nov 05 j 14:17	0°☾45'37		min. Earth dist.	-4312 Feb 09 j 17:21	16°☾51'52	29.26063 AU
	-4321 Dec 30 j 06:15	30°RII		direct	-4312 Apr 30 j 04:30	15°☾28'20	
opposition	-4320 Jan 21 j 22:46	29°II23'50	1°03'35	conjunction	-4312 Aug 14 j 13:59	17°☾59'29	1°34'50
min. Earth dist.	-4320 Jan 22 j 22:24	29°II22'12	29.22103 AU	minimum elong	-4312 Aug 14 j 13:59	17°☾59'29	1°35'02
direct	-4320 Apr 12 j 04:13	27°II58'39		max. Earth dist.	-4312 Aug 13 j 14:34	17°☾57'17	31.26155 AU
	-4320 Jul 14 j 08:33	0°☾		retrograde	-4312 Nov 24 j 08:22	20°☾25'47	
max. Earth dist.	-4320 Jul 26 j 23:37	0°☾28'08	31.22485 AU	opposition	-4311 Feb 10 j 06:05	19°☾03'57	1°43'12
				min. Earth dist.	-4311 Feb 11 j 04:56	19°☾02'23	29.26496 AU
conjunction	-4320 Jul 28 j 01:12	0°☾30'31	1°01'51	direct	-4311 May 02 j 17:43	17°☾38'53	
minimum elong	-4320 Jul 28 j 01:11	0°☾30'31	1°02'03				
retrograde	-4320 Nov 07 j 01:24	2°☾57'10		conjunction	-4311 Aug 16 j 23:58	20°☾09'57	1°38'24
opposition	-4319 Jan 23 j 10:02	1°☾35'25	1°08'27	minimum elong	-4311 Aug 16 j 23:58	20°☾09'57	1°38'35
min. Earth dist.	-4319 Jan 24 j 09:04	1°☾33'50	29.22967 AU	max. Earth dist.	-4311 Aug 16 j 00:08	20°☾07'43	31.26640 AU
direct	-4319 Apr 14 j 16:06	0°☾10'17		retrograde	-4311 Nov 26 j 19:35	22°☾36'16	
max. Earth dist.	-4319 Jul 29 j 11:31	2°☾39'48	31.23278 AU	opposition	-4310 Feb 12 j 17:31	21°☾14'27	1°46'56
				min. Earth dist.	-4310 Feb 13 j 15:02	21°☾12'59	29.27035 AU
conjunction	-4319 Jul 30 j 12:18	2°☾42'06	1°06'22	direct	-4310 May 05 j 05:08	19°☾49'26	
minimum elong	-4319 Jul 30 j 12:18	2°☾42'06	1°06'33	max. Earth dist.	-4310 Aug 18 j 11:44	22°☾18'22	31.27208 AU
retrograde	-4319 Nov 09 j 10:03	5°☾08'42					
opposition	-4318 Jan 25 j 21:23	3°☾47'00	1°13'13	conjunction	-4310 Aug 19 j 10:03	22°☾20'28	1°41'49
min. Earth dist.	-4318 Jan 26 j 21:36	3°☾45'20	29.23703 AU	minimum elong	-4310 Aug 19 j 10:03	22°☾20'28	1°42'00
direct	-4318 Apr 17 j 04:43	2°☾21'54		retrograde	-4310 Nov 29 j 04:47	24°☾46'49	
				opposition	-4309 Feb 15 j 05:21	23°☾25'02	1°50'30
conjunction	-4318 Aug 01 j 23:14	4°☾53'39	1°10'46	min. Earth dist.	-4309 Feb 16 j 03:17	23°☾23'32	29.27636 AU
minimum elong	-4318 Aug 01 j 23:14	4°☾53'39	1°10'59	direct	-4309 May 07 j 17:42	22°☾00'07	
max. Earth dist.	-4318 Jul 31 j 21:27	4°☾51'14	31.23945 AU				
retrograde	-4318 Nov 11 j 21:12	7°☾20'12		conjunction	-4309 Aug 21 j 19:48	24°☾31'04	1°45'05
opposition	-4317 Jan 28 j 08:48	5°☾58'30	1°17'53	minimum elong	-4309 Aug 21 j 19:47	24°☾31'04	1°45'16
min. Earth dist.	-4317 Jan 29 j 08:11	5°☾56'54	29.24302 AU	max. Earth dist.	-4309 Aug 20 j 21:23	24°☾28'58	31.27829 AU
direct	-4317 Apr 19 j 17:05	4°☾33'25		retrograde	-4309 Dec 01 j 16:11	26°☾57'29	
max. Earth dist.	-4317 Aug 03 j 08:37	7°☾02'42	31.24464 AU	opposition	-4308 Feb 17 j 17:08	25°☾35'44	1°53'55
				min. Earth dist.	-4308 Feb 18 j 13:36	25°☾34'20	29.28258 AU
conjunction	-4317 Aug 04 j 10:03	7°☾05'05	1°15'05	direct	-4308 May 09 j 05:50	24°☾10'53	
minimum elong	-4317 Aug 04 j 10:03	7°☾05'05	1°15'17	max. Earth dist.	-4308 Aug 22 j 08:06	26°☾39'47	31.28427 AU
retrograde	-4317 Nov 14 j 05:41	9°☾31'35					
opposition	-4316 Jan 30 j 20:25	8°☾09'53	1°22'26	conjunction	-4308 Aug 23 j 05:44	26°☾41'48	1°48'12
min. Earth dist.	-4316 Jan 31 j 20:55	8°☾08'12	29.24769 AU	minimum elong	-4308 Aug 23 j 05:44	26°☾41'48	1°48'24
direct	-4316 Apr 21 j 04:18	6°☾44'48		retrograde	-4308 Dec 03 j 01:14	29°☾08'17	
				opposition	-4307 Feb 19 j 04:59	27°☾46'33	1°57'10
conjunction	-4316 Aug 05 j 20:46	9°☾16'22	1°19'17	min. Earth dist.	-4307 Feb 20 j 02:13	27°☾45'07	29.28845 AU
minimum elong	-4316 Aug 05 j 20:45	9°☾16'22	1°19'29	direct	-4307 May 11 j 16:28	26°☾21'48	
max. Earth dist.	-4316 Aug 04 j 19:19	9°☾13'59	31.24874 AU				
retrograde	-4316 Nov 15 j 15:05	11°☾42'48		conjunction	-4307 Aug 25 j 15:38	28°☾52'39	1°51'10
opposition	-4315 Feb 01 j 07:47	10°☾21'04	1°26'51	minimum elong	-4307 Aug 25 j 15:37	28°☾52'39	1°51'21
min. Earth dist.	-4315 Feb 02 j 07:28	10°☾19'27	29.25128 AU	max. Earth dist.	-4307 Aug 24 j 18:24	28°☾50'40	31.28972 AU
direct	-4315 Apr 23 j 17:13	8°☾55'58			-4307 Sep 25 j 14:56	0°♂	
max. Earth dist.	-4315 Aug 07 j 05:38	11°☾25'02	31.25187 AU	retrograde	-4307 Dec 05 j 10:55	1°♂19'11	
					-4306 Feb 20 j 03:54	30°R☾	
conjunction	-4315 Aug 08 j 07:18	11°☾27'26	1°23'22	opposition	-4306 Feb 21 j 16:57	29°☾57'29	2°00'15
minimum elong	-4315 Aug 08 j 07:18	11°☾27'26	1°23'34	min. Earth dist.	-4306 Feb 22 j 13:06	29°☾56'07	29.29335 AU
retrograde	-4315 Nov 18 j 01:27	13°☾53'50		direct	-4306 May 14 j 04:40	28°☾32'48	
opposition	-4314 Feb 03 j 19:18	12°☾32'04	1°31'09		-4306 Jul 29 j 22:30	0°♂	
min. Earth dist.	-4314 Feb 04 j 19:26	12°☾30'25	29.25429 AU	max. Earth dist.	-4306 Aug 27 j 04:05	1°♂01'35	31.29395 AU
direct	-4314 Apr 26 j 03:27	11°☾06'57					
				conjunction	-4306 Aug 28 j 01:26	1°♂03'35	1°53'58
conjunction	-4314 Aug 10 j 17:43	13°☾38'17	1°27'19	minimum elong	-4306 Aug 28 j 01:26	1°♂03'35	1°54'09
minimum elong	-4314 Aug 10 j 17:42	13°☾38'17	1°27'32	retrograde	-4306 Dec 07 j 21:51	3°♂30'10	
max. Earth dist.	-4314 Aug 09 j 17:01	13°☾35'59	31.25469 AU	opposition	-4305 Feb 24 j 05:06	2°♂08'28	2°03'10
retrograde	-4314 Nov 20 j 10:52	16°☾04'38		min. Earth dist.	-4305 Feb 25 j 01:30	2°♂07'05	29.29711 AU
opposition	-4313 Feb 06 j 06:50	14°☾42'50	1°35'18	direct	-4305 May 16 j 13:56	0°♂43'50	
min. Earth dist.	-4313 Feb 07 j 06:24	14°☾41'13	29.25711 AU				
direct	-4313 Apr 28 j 16:50	13°☾17'43		conjunction	-4305 Aug 30 j 11:20	3°♂14'32	1°56'37
max. Earth dist.	-4313 Aug 12 j 02:46	15°☾46'36	31.25770 AU				

Planetary Phenomena of Neptune from -4400 through -3900 (UT), Astrodienst AG 7-Dez-2017 14:36, page 7

Attention, astronomical year style is used: The year -4305 in astronomical counting style is the year 4306 BCE in historical counting style.

minimum elong	-4305 Aug 30 j 11:20	3°Ω14'32	1°56'47	minimum elong	-4297 Sep 16 j 14:21	20°Ω38'50	2°11'36
max. Earth dist.	-4305 Aug 29 j 15:00	3°Ω12'37	31.29700 AU	max. Earth dist.	-4297 Sep 15 j 23:09	20°Ω37'24	31.30386 AU
retrograde	-4305 Dec 10 j 07:44	5°Ω41'10		retrograde	-4297 Dec 27 j 19:59	23°Ω05'53	
opposition	-4304 Feb 26 j 17:16	4°Ω19'27	2°05'53	opposition	-4296 Mar 15 j 19:11	21°Ω43'50	2°21'01
min. Earth dist.	-4304 Feb 27 j 13:07	4°Ω18'06	29.29947 AU	min. Earth dist.	-4296 Mar 16 j 09:28	21°Ω42'52	29.30692 AU
direct	-4304 May 18 j 03:00	2°Ω54'52		direct	-4296 Jun 05 j 01:32	20°Ω19'33	
conjunction	-4304 Aug 31 j 20:56	5°Ω25'28	1°59'05	conjunction	-4296 Sep 17 j 23:32	22°Ω49'17	2°12'30
minimum elong	-4304 Aug 31 j 20:55	5°Ω25'28	1°59'16	minimum elong	-4296 Sep 17 j 23:32	22°Ω49'17	2°12'38
max. Earth dist.	-4304 Aug 30 j 23:56	5°Ω23'29	31.29869 AU	max. Earth dist.	-4296 Sep 17 j 09:58	22°Ω48'00	31.30651 AU
retrograde	-4304 Dec 11 j 20:09	7°Ω52'08		retrograde	-4296 Dec 29 j 05:53	25°Ω16'27	
opposition	-4303 Feb 28 j 05:23	6°Ω30'22	2°08'27	opposition	-4295 Mar 18 j 07:39	23°Ω54'24	2°22'01
min. Earth dist.	-4303 Mar 01 j 00:47	6°Ω29'04	29.30063 AU	min. Earth dist.	-4295 Mar 18 j 21:02	23°Ω53'30	29.30932 AU
direct	-4303 May 20 j 14:06	5°Ω05'48		direct	-4295 Jun 07 j 14:00	22°Ω30'12	
max. Earth dist.	-4303 Sep 02 j 11:10	7°Ω34'28	31.29921 AU				
conjunction	-4303 Sep 03 j 06:40	7°Ω36'18	2°01'23	conjunction	-4295 Sep 20 j 08:38	24°Ω59'52	2°13'20
minimum elong	-4303 Sep 03 j 06:40	7°Ω36'18	2°01'32	minimum elong	-4295 Sep 20 j 08:38	24°Ω59'52	2°13'27
retrograde	-4303 Dec 14 j 05:53	10°Ω02'59		max. Earth dist.	-4295 Sep 19 j 18:42	24°Ω58'33	31.30862 AU
opposition	-4302 Mar 02 j 17:30	8°Ω41'10	2°10'49	retrograde	-4295 Dec 31 j 18:19	27°Ω27'08	
min. Earth dist.	-4302 Mar 03 j 13:02	8°Ω39'51	29.30067 AU	opposition	-4294 Mar 20 j 20:07	26°Ω05'05	2°22'48
direct	-4302 May 23 j 02:49	7°Ω16'37		min. Earth dist.	-4294 Mar 21 j 08:45	26°Ω04'14	29.31110 AU
				direct	-4294 Jun 09 j 23:46	24°Ω40'58	
conjunction	-4302 Sep 05 j 16:07	9°Ω46'59	2°03'31	conjunction	-4294 Sep 22 j 17:57	27°Ω10'33	2°13'59
minimum elong	-4302 Sep 05 j 16:07	9°Ω46'59	2°03'41	minimum elong	-4294 Sep 22 j 17:57	27°Ω10'33	2°14'07
max. Earth dist.	-4302 Sep 04 j 20:15	9°Ω45'07	31.29901 AU	max. Earth dist.	-4294 Sep 22 j 05:43	27°Ω09'24	31.30983 AU
retrograde	-4302 Dec 16 j 17:25	12°Ω13'42		retrograde	-4293 Jan 03 j 04:44	29°Ω37'57	
opposition	-4301 Mar 05 j 05:41	10°Ω51'49	2°13'00	opposition	-4293 Mar 23 j 08:56	28°Ω15'52	2°23'24
min. Earth dist.	-4301 Mar 05 j 23:46	10°Ω50'36	29.30037 AU	min. Earth dist.	-4293 Mar 23 j 21:32	28°Ω15'01	29.31169 AU
direct	-4301 May 25 j 14:30	9°Ω27'17		direct	-4293 Jun 12 j 11:26	26°Ω51'51	
max. Earth dist.	-4301 Sep 07 j 07:16	11°Ω55'48	31.29859 AU				
conjunction	-4301 Sep 08 j 01:28	11°Ω57'31	2°05'28	conjunction	-4293 Sep 25 j 03:01	29°Ω21'20	2°14'27
minimum elong	-4301 Sep 08 j 01:28	11°Ω57'31	2°05'37	minimum elong	-4293 Sep 25 j 03:01	29°Ω21'20	2°14'33
retrograde	-4301 Dec 19 j 03:09	14°Ω24'16		max. Earth dist.	-4293 Sep 24 j 14:28	29°Ω20'09	31.30979 AU
opposition	-4300 Mar 06 j 18:02	13°Ω02'19	2°15'00		-4293 Oct 12 j 09:09	0°൬	
min. Earth dist.	-4300 Mar 07 j 12:15	13°Ω01'05	29.30017 AU	retrograde	-4292 Jan 05 j 17:19	1°൬48'51	
direct	-4300 May 27 j 04:05	11°Ω37'47		opposition	-4292 Mar 24 j 21:39	0°൬26'44	2°23'47
				min. Earth dist.	-4292 Mar 25 j 08:51	0°൬25'59	29.31092 AU
conjunction	-4300 Sep 09 j 10:43	14°Ω07'54	2°07'15		-4292 Apr 10 j 17:09	30°℞Ω	
minimum elong	-4300 Sep 09 j 10:43	14°Ω07'54	2°07'24	direct	-4292 Jun 13 j 22:43	29°Ω02'46	
max. Earth dist.	-4300 Sep 08 j 16:51	14°Ω06'13	31.29871 AU		-4292 Aug 13 j 14:40	0°൬	
	-4300 Oct 02 j 23:39	15°Ω		conjunction	-4292 Sep 26 j 12:21	1°൬32'10	2°14'43
retrograde	-4300 Dec 20 j 14:34	16°Ω34'41		minimum elong	-4292 Sep 26 j 12:21	1°൬32'10	2°14'49
opposition	-4299 Mar 09 j 06:03	15°Ω12'42	2°16'48	max. Earth dist.	-4292 Sep 26 j 01:00	1°൬31'06	31.30815 AU
min. Earth dist.	-4299 Mar 09 j 22:20	15°Ω11'35	29.30068 AU	retrograde	-4291 Jan 07 j 04:08	3°൬59'47	
	-4299 Mar 17 j 02:23	15°℞Ω		opposition	-4291 Mar 27 j 10:22	2°൬37'37	2°23'58
direct	-4299 May 29 j 16:49	13°Ω48'11		min. Earth dist.	-4291 Mar 27 j 22:01	2°൬36'50	29.30852 AU
	-4299 Aug 06 j 09:30	15°Ω		direct	-4291 Jun 16 j 11:40	1°൬13'42	
conjunction	-4299 Sep 11 j 20:02	16°Ω18'12	2°08'50	conjunction	-4291 Sep 28 j 21:33	3°൬43'00	2°14'47
minimum elong	-4299 Sep 11 j 20:02	16°Ω18'12	2°08'58	minimum elong	-4291 Sep 28 j 21:34	3°൬43'00	2°14'53
max. Earth dist.	-4299 Sep 11 j 03:14	16°Ω16'37	31.29958 AU	max. Earth dist.	-4291 Sep 28 j 10:19	3°൬41'56	31.30510 AU
retrograde	-4299 Dec 22 j 23:27	18°Ω45'03		retrograde	-4290 Jan 09 j 16:18	6°൬10'42	
opposition	-4298 Mar 11 j 18:25	17°Ω23'02	2°18'24	opposition	-4290 Mar 29 j 23:05	4°൬48'28	2°23'57
min. Earth dist.	-4298 Mar 12 j 10:47	17°Ω21'55	29.30210 AU	min. Earth dist.	-4290 Mar 30 j 09:04	4°൬47'48	29.30470 AU
direct	-4298 Jun 01 j 03:50	15°Ω58'35		direct	-4290 Jun 19 j 00:30	3°൬24'35	
conjunction	-4298 Sep 14 j 05:11	18°Ω28'29	2°10'15	conjunction	-4290 Oct 01 j 06:36	5°൬53'46	2°14'41
minimum elong	-4298 Sep 14 j 05:11	18°Ω28'29	2°10'24	minimum elong	-4290 Oct 01 j 06:36	5°൬53'46	2°14'47
max. Earth dist.	-4298 Sep 13 j 13:38	18°Ω27'01	31.30145 AU	max. Earth dist.	-4290 Sep 30 j 20:07	5°൬52'47	31.30067 AU
retrograde	-4298 Dec 25 j 08:50	20°Ω55'26		retrograde	-4289 Jan 12 j 01:49	8°൬21'35	
opposition	-4297 Mar 14 j 06:45	19°Ω33'23	2°19'48	opposition	-4289 Apr 01 j 12:02	6°൬59'16	2°23'44
min. Earth dist.	-4297 Mar 14 j 21:21	19°Ω32'24	29.30424 AU	min. Earth dist.	-4289 Apr 01 j 22:16	6°൬58'34	29.29990 AU
direct	-4297 Jun 03 j 16:14	18°Ω09'01		direct	-4289 Jun 21 j 12:00	5°൬35'24	
conjunction	-4297 Sep 16 j 14:21	20°Ω38'50	2°11'28	conjunction	-4289 Oct 03 j 15:39	8°൬04'27	2°14'22

Attention, astronomical year style is used: The year -4289 in astronomical counting style is the year 4290 BCE in historical counting style.

minimum elong	-4289 Oct 03 j 15:39	8° $\mathring{\mu}$ 04'27	2°14'27	opposition	-4280 Apr 21 j 07:53	26° $\mathring{\mu}$ 36'45	2°12'34
max. Earth dist.	-4289 Oct 03 j 06:29	8° $\mathring{\mu}$ 03'35	31.29567 AU	min. Earth dist.	-4280 Apr 21 j 09:22	26° $\mathring{\mu}$ 36'39	29.26565 AU
retrograde	-4288 Jan 14 j 11:21	10° $\mathring{\mu}$ 32'21		direct	-4280 Jul 10 j 17:00	25° $\mathring{\mu}$ 13'24	
opposition	-4288 Apr 03 j 00:43	9° $\mathring{\mu}$ 09'57	2°23'18				
min. Earth dist.	-4288 Apr 03 j 09:13	9° $\mathring{\mu}$ 09'23	29.29471 AU	conjunction	-4280 Oct 22 j 00:21	27° $\mathring{\mu}$ 41'41	2°03'04
direct	-4288 Jun 23 j 01:00	7° $\mathring{\mu}$ 46'06		minimum elong	-4280 Oct 22 j 00:21	27° $\mathring{\mu}$ 41'41	2°03'06
				max. Earth dist.	-4280 Oct 21 j 23:49	27° $\mathring{\mu}$ 41'38	31.26137 AU
conjunction	-4288 Oct 05 j 00:31	10° $\mathring{\mu}$ 15'02	2°13'53		-4279 Jan 08 j 01:41	0° $\underline{\mathring{\mu}}$	
minimum elong	-4288 Oct 05 j 00:31	10° $\mathring{\mu}$ 15'02	2°13'58	retrograde	-4279 Feb 02 j 18:14	0° $\underline{\mathring{\mu}}$ 10'53	
max. Earth dist.	-4288 Oct 04 j 15:39	10° $\mathring{\mu}$ 14'12	31.29053 AU		-4279 Feb 28 j 23:21	30° $\mathring{\mu}$	
retrograde	-4287 Jan 15 j 22:29	12° $\mathring{\mu}$ 43'04		opposition	-4279 Apr 23 j 20:54	28° $\mathring{\mu}$ 48'00	2°10'20
opposition	-4287 Apr 05 j 13:31	11° $\mathring{\mu}$ 20'34	2°22'41	min. Earth dist.	-4279 Apr 23 j 20:54	28° $\mathring{\mu}$ 48'00	29.25943 AU
min. Earth dist.	-4287 Apr 05 j 21:29	11° $\mathring{\mu}$ 20'02	29.28984 AU	direct	-4279 Jul 13 j 06:30	27° $\mathring{\mu}$ 24'42	
direct	-4287 Jun 25 j 10:58	9° $\mathring{\mu}$ 56'45					
				conjunction	-4279 Oct 24 j 09:26	29° $\mathring{\mu}$ 52'53	2°00'54
conjunction	-4287 Oct 07 j 09:28	12° $\mathring{\mu}$ 25'34	2°13'11	minimum elong	-4279 Oct 24 j 09:26	29° $\mathring{\mu}$ 52'53	2°00'54
minimum elong	-4287 Oct 07 j 09:28	12° $\mathring{\mu}$ 25'35	2°13'15	max. Earth dist.	-4279 Oct 24 j 08:42	29° $\mathring{\mu}$ 52'48	31.25443 AU
max. Earth dist.	-4287 Oct 07 j 02:36	12° $\mathring{\mu}$ 24'56	31.28593 AU		-4279 Oct 27 j 12:41	0° $\underline{\mathring{\mu}}$	
retrograde	-4286 Jan 18 j 07:54	14° $\mathring{\mu}$ 53'43		retrograde	-4278 Feb 05 j 06:07	2° $\underline{\mathring{\mu}}$ 22'13	
opposition	-4286 Apr 08 j 02:15	13° $\mathring{\mu}$ 31'10	2°21'51	opposition	-4278 Apr 26 j 10:03	0° $\underline{\mathring{\mu}}$ 59'14	2°07'55
min. Earth dist.	-4286 Apr 08 j 08:48	13° $\mathring{\mu}$ 30'43	29.28552 AU	min. Earth dist.	-4278 Apr 26 j 09:54	0° $\underline{\mathring{\mu}}$ 59'14	29.25180 AU
direct	-4286 Jun 27 j 23:32	12° $\mathring{\mu}$ 07'24			-4278 Jun 06 j 01:54	30° $\mathring{\mu}$	
				direct	-4278 Jul 15 j 17:19	29° $\mathring{\mu}$ 35'56	
conjunction	-4286 Oct 09 j 18:18	14° $\mathring{\mu}$ 36'07	2°12'19		-4278 Aug 22 j 23:03	0° $\underline{\mathring{\mu}}$	
minimum elong	-4286 Oct 09 j 18:18	14° $\mathring{\mu}$ 36'07	2°12'23	conjunction	-4278 Oct 26 j 18:40	2° $\underline{\mathring{\mu}}$ 04'00	1°58'33
max. Earth dist.	-4286 Oct 09 j 11:31	14° $\mathring{\mu}$ 35'29	31.28214 AU	minimum elong	-4278 Oct 26 j 18:41	2° $\underline{\mathring{\mu}}$ 04'00	1°58'34
retrograde	-4285 Jan 20 j 20:11	17° $\mathring{\mu}$ 04'24		max. Earth dist.	-4278 Oct 26 j 19:37	2° $\underline{\mathring{\mu}}$ 04'06	31.24623 AU
opposition	-4285 Apr 10 j 15:07	15° $\mathring{\mu}$ 41'48	2°20'48	retrograde	-4277 Feb 07 j 15:33	4° $\underline{\mathring{\mu}}$ 33'28	
min. Earth dist.	-4285 Apr 10 j 20:18	15° $\mathring{\mu}$ 41'27	29.28220 AU	opposition	-4277 Apr 28 j 23:08	3° $\underline{\mathring{\mu}}$ 10'22	2°05'20
direct	-4285 Jun 30 j 08:39	14° $\mathring{\mu}$ 18'06		min. Earth dist.	-4277 Apr 28 j 21:55	3° $\underline{\mathring{\mu}}$ 10'27	29.24295 AU
				direct	-4277 Jul 18 j 06:02	1° $\underline{\mathring{\mu}}$ 47'05	
conjunction	-4285 Oct 12 j 03:12	16° $\mathring{\mu}$ 46'44	2°11'15				
minimum elong	-4285 Oct 12 j 03:12	16° $\mathring{\mu}$ 46'45	2°11'17	conjunction	-4277 Oct 29 j 03:37	4° $\underline{\mathring{\mu}}$ 15'02	1°56'02
max. Earth dist.	-4285 Oct 11 j 22:37	16° $\mathring{\mu}$ 46'19	31.27914 AU	minimum elong	-4277 Oct 29 j 03:38	4° $\underline{\mathring{\mu}}$ 15'02	1°56'01
retrograde	-4284 Jan 23 j 06:32	19° $\mathring{\mu}$ 15'11		max. Earth dist.	-4277 Oct 29 j 04:24	4° $\underline{\mathring{\mu}}$ 15'06	31.23712 AU
opposition	-4284 Apr 12 j 04:02	17° $\mathring{\mu}$ 52'32	2°19'34	retrograde	-4276 Feb 10 j 03:21	6° $\underline{\mathring{\mu}}$ 44'36	
min. Earth dist.	-4284 Apr 12 j 08:41	17° $\mathring{\mu}$ 52'13	29.27937 AU	opposition	-4276 Apr 30 j 12:11	5° $\underline{\mathring{\mu}}$ 21'24	2°02'33
direct	-4284 Jul 01 j 19:18	16° $\mathring{\mu}$ 28'55		min. Earth dist.	-4276 Apr 30 j 09:56	5° $\underline{\mathring{\mu}}$ 21'33	29.23359 AU
				direct	-4276 Jul 19 j 16:01	3° $\underline{\mathring{\mu}}$ 58'06	
conjunction	-4284 Oct 13 j 12:05	18° $\mathring{\mu}$ 57'29	2°09'59				
minimum elong	-4284 Oct 13 j 12:05	18° $\mathring{\mu}$ 57'29	2°10'02	conjunction	-4276 Oct 30 j 12:46	6° $\underline{\mathring{\mu}}$ 25'56	1°53'21
max. Earth dist.	-4284 Oct 13 j 07:40	18° $\mathring{\mu}$ 57'04	31.27661 AU	minimum elong	-4276 Oct 30 j 12:47	6° $\underline{\mathring{\mu}}$ 25'56	1°53'21
retrograde	-4283 Jan 24 j 19:32	21° $\mathring{\mu}$ 26'04		max. Earth dist.	-4276 Oct 30 j 15:33	6° $\underline{\mathring{\mu}}$ 26'12	31.22766 AU
opposition	-4283 Apr 14 j 16:42	20° $\mathring{\mu}$ 03'24	2°18'07	retrograde	-4275 Feb 11 j 13:21	8° $\underline{\mathring{\mu}}$ 55'38	
min. Earth dist.	-4283 Apr 14 j 19:38	20° $\mathring{\mu}$ 03'12	29.27683 AU	opposition	-4275 May 03 j 01:05	7° $\underline{\mathring{\mu}}$ 32'19	1°59'36
direct	-4283 Jul 04 j 05:55	18° $\mathring{\mu}$ 39'51		min. Earth dist.	-4275 May 02 j 22:21	7° $\underline{\mathring{\mu}}$ 32'30	29.22417 AU
				direct	-4275 Jul 22 j 03:11	6° $\underline{\mathring{\mu}}$ 09'01	
conjunction	-4283 Oct 15 j 21:07	21° $\mathring{\mu}$ 08'22	2°08'32				
minimum elong	-4283 Oct 15 j 21:07	21° $\mathring{\mu}$ 08'22	2°08'34	conjunction	-4275 Nov 01 j 21:46	8° $\underline{\mathring{\mu}}$ 36'45	1°50'31
max. Earth dist.	-4283 Oct 15 j 18:13	21° $\mathring{\mu}$ 08'05	31.27394 AU	minimum elong	-4275 Nov 01 j 21:47	8° $\underline{\mathring{\mu}}$ 36'45	1°50'29
retrograde	-4282 Jan 27 j 07:31	23° $\mathring{\mu}$ 37'07		max. Earth dist.	-4275 Nov 02 j 00:57	8° $\underline{\mathring{\mu}}$ 37'03	31.21866 AU
opposition	-4282 Apr 17 j 05:48	22° $\mathring{\mu}$ 14'24	2°16'28	retrograde	-4274 Feb 14 j 02:12	11° $\underline{\mathring{\mu}}$ 06'35	
min. Earth dist.	-4282 Apr 17 j 08:48	22° $\mathring{\mu}$ 14'12	29.27395 AU	opposition	-4274 May 05 j 14:04	9° $\underline{\mathring{\mu}}$ 43'10	1°56'29
direct	-4282 Jul 06 j 17:53	20° $\mathring{\mu}$ 50'56		min. Earth dist.	-4274 May 05 j 09:19	9° $\underline{\mathring{\mu}}$ 43'29	29.21555 AU
				direct	-4274 Jul 24 j 13:44	8° $\underline{\mathring{\mu}}$ 19'54	
conjunction	-4282 Oct 18 j 06:01	23° $\mathring{\mu}$ 19'22	2°06'54				
minimum elong	-4282 Oct 18 j 06:02	23° $\mathring{\mu}$ 19'22	2°06'56	conjunction	-4274 Nov 04 j 06:46	10° $\underline{\mathring{\mu}}$ 47'33	1°47'31
max. Earth dist.	-4282 Oct 18 j 03:44	23° $\mathring{\mu}$ 19'09	31.27086 AU	minimum elong	-4274 Nov 04 j 06:46	10° $\underline{\mathring{\mu}}$ 47'33	1°47'30
retrograde	-4281 Jan 29 j 20:26	25° $\mathring{\mu}$ 48'17		max. Earth dist.	-4274 Nov 04 j 11:36	10° $\underline{\mathring{\mu}}$ 48'00	31.21048 AU
opposition	-4281 Apr 19 j 18:49	24° $\mathring{\mu}$ 25'32	2°14'37	retrograde	-4273 Feb 16 j 14:06	13° $\underline{\mathring{\mu}}$ 17'33	
min. Earth dist.	-4281 Apr 19 j 19:56	24° $\mathring{\mu}$ 25'27	29.27036 AU	opposition	-4273 May 08 j 03:12	11° $\underline{\mathring{\mu}}$ 54'03	1°53'12
direct	-4281 Jul 09 j 05:43	23° $\mathring{\mu}$ 02'08		min. Earth dist.	-4273 May 07 j 22:07	11° $\underline{\mathring{\mu}}$ 54'23	29.20789 AU
				direct	-4273 Jul 27 j 00:48	10° $\underline{\mathring{\mu}}$ 30'50	
conjunction	-4281 Oct 20 j 15:09	25° $\mathring{\mu}$ 30'30	2°05'04				
minimum elong	-4281 Oct 20 j 15:10	25° $\mathring{\mu}$ 30'30	2°05'06	conjunction	-4273 Nov 06 j 15:53	12° $\underline{\mathring{\mu}}$ 58'25	1°44'22
max. Earth dist.	-4281 Oct 20 j 13:27	25° $\mathring{\mu}$ 30'20	31.26671 AU	minimum elong	-4273 Nov 06 j 15:54	12° $\underline{\mathring{\mu}}$ 58'25	1°44'19
retrograde	-4280 Feb 01 j 07:14	27° $\mathring{\mu}$ 59'34					

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Attention, astronomical year style is used: The year -4273 in astronomical counting style is the year 4274 BCE in historical counting style.

max. Earth dist.	-4273 Nov 06 j 21:48	12° $\underline{\text{A}}$ 58'58	31.20349 AU	max. Earth dist.	-4265 Nov 24 j 07:47	0° M 32'34	31.14631 AU
retrograde	-4272 Feb 19 j 03:06	15° $\underline{\text{A}}$ 28'34		retrograde	-4264 Mar 08 j 02:20	3° M 02'57	
opposition	-4272 May 09 j 15:58	14° $\underline{\text{A}}$ 05'01	1°49'44	opposition	-4264 May 28 j 00:36	1° M 38'57	1°16'41
min. Earth dist.	-4272 May 09 j 08:40	14° $\underline{\text{A}}$ 05'31	29.20128 AU	min. Earth dist.	-4264 May 27 j 12:21	1° M 39'47	29.14146 AU
direct	-4272 Jul 28 j 11:45	12° $\underline{\text{A}}$ 41'51		direct	-4264 Aug 15 j 04:24	0° M 16'09	
conjunction	-4272 Nov 08 j 01:00	15° $\underline{\text{A}}$ 09'25	1°41'03	conjunction	-4264 Nov 25 j 05:16	2° M 43'20	1°09'37
minimum elong	-4272 Nov 08 j 01:01	15° $\underline{\text{A}}$ 09'25	1°41'01	minimum elong	-4264 Nov 25 j 05:16	2° M 43'20	1°09'31
max. Earth dist.	-4272 Nov 08 j 07:42	15° $\underline{\text{A}}$ 10'03	31.19729 AU	max. Earth dist.	-4264 Nov 25 j 18:19	2° M 44'35	31.13549 AU
retrograde	-4271 Feb 20 j 14:53	17° $\underline{\text{A}}$ 39'45		retrograde	-4263 Mar 10 j 15:10	5° M 14'59	
opposition	-4271 May 12 j 05:03	16° $\underline{\text{A}}$ 16'10	1°46'07	opposition	-4263 May 30 j 13:29	3° M 50'53	1°11'59
min. Earth dist.	-4271 May 11 j 21:42	16° $\underline{\text{A}}$ 16'40	29.19541 AU	min. Earth dist.	-4263 May 29 j 23:21	3° M 51'51	29.13049 AU
direct	-4271 Jul 30 j 22:32	14° $\underline{\text{A}}$ 53'05		direct	-4263 Aug 17 j 15:11	2° M 28'03	
conjunction	-4271 Nov 10 j 10:10	17° $\underline{\text{A}}$ 20'36	1°37'35	conjunction	-4263 Nov 27 j 14:48	4° M 55'11	1°05'10
minimum elong	-4271 Nov 10 j 10:11	17° $\underline{\text{A}}$ 20'36	1°37'32	minimum elong	-4263 Nov 27 j 14:49	4° M 55'11	1°05'03
max. Earth dist.	-4271 Nov 10 j 18:38	17° $\underline{\text{A}}$ 21'24	31.19173 AU	max. Earth dist.	-4263 Nov 28 j 04:26	4° M 56'28	31.12463 AU
retrograde	-4270 Feb 23 j 03:03	19° $\underline{\text{A}}$ 51'08		retrograde	-4262 Mar 13 j 03:37	7° M 26'58	
opposition	-4270 May 14 j 18:02	18° $\underline{\text{A}}$ 27'31	1°42'20	opposition	-4262 Jun 02 j 02:32	6° M 02'45	1°07'10
min. Earth dist.	-4270 May 14 j 08:53	18° $\underline{\text{A}}$ 28'08	29.18983 AU	min. Earth dist.	-4262 Jun 01 j 12:28	6° M 03'42	29.11996 AU
direct	-4270 Aug 02 j 11:32	17° $\underline{\text{A}}$ 04'31		direct	-4262 Aug 20 j 02:29	4° M 39'55	
conjunction	-4270 Nov 12 j 19:25	19° $\underline{\text{A}}$ 32'01	1°33'58	conjunction	-4262 Nov 30 j 00:40	7° M 06'59	1°00'37
minimum elong	-4270 Nov 12 j 19:25	19° $\underline{\text{A}}$ 32'01	1°33'56	minimum elong	-4262 Nov 30 j 00:41	7° M 06'59	1°00'31
max. Earth dist.	-4270 Nov 13 j 03:54	19° $\underline{\text{A}}$ 32'49	31.18624 AU	max. Earth dist.	-4262 Nov 30 j 16:05	7° M 08'26	31.11456 AU
retrograde	-4269 Feb 25 j 16:06	22° $\underline{\text{A}}$ 02'44		retrograde	-4261 Mar 15 j 16:44	9° M 38'52	
opposition	-4269 May 17 j 07:10	20° $\underline{\text{A}}$ 39'06	1°38'24	opposition	-4261 Jun 04 j 15:20	8° M 14'34	1°02'16
min. Earth dist.	-4269 May 16 j 21:46	20° $\underline{\text{A}}$ 39'44	29.18426 AU	min. Earth dist.	-4261 Jun 03 j 23:27	8° M 15'39	29.11030 AU
direct	-4269 Aug 04 j 21:49	19° $\underline{\text{A}}$ 16'10		direct	-4261 Aug 22 j 15:22	6° M 51'44	
conjunction	-4269 Nov 15 j 04:54	21° $\underline{\text{A}}$ 43'38	1°30'14	conjunction	-4261 Dec 02 j 10:26	9° M 18'47	0°55'59
minimum elong	-4269 Nov 15 j 04:55	21° $\underline{\text{A}}$ 43'38	1°30'09	minimum elong	-4261 Dec 02 j 10:26	9° M 18'47	0°55'52
max. Earth dist.	-4269 Nov 15 j 15:11	21° $\underline{\text{A}}$ 44'36	31.18044 AU	max. Earth dist.	-4261 Dec 03 j 01:51	9° M 20'14	31.10546 AU
retrograde	-4268 Feb 28 j 02:18	24° $\underline{\text{A}}$ 14'33		retrograde	-4260 Mar 17 j 05:45	11° M 50'49	
opposition	-4268 May 18 j 20:14	22° $\underline{\text{A}}$ 50'52	1°34'19	opposition	-4260 Jun 06 j 04:15	10° M 26'26	0°57'16
min. Earth dist.	-4268 May 18 j 09:52	22° $\underline{\text{A}}$ 51'35	29.17795 AU	min. Earth dist.	-4260 Jun 05 j 12:01	10° M 27'33	29.10175 AU
direct	-4268 Aug 06 j 10:04	21° $\underline{\text{A}}$ 28'01		direct	-4260 Aug 24 j 01:41	9° M 03'37	
conjunction	-4268 Nov 16 j 14:24	23° $\underline{\text{A}}$ 55'27	1°26'20	conjunction	-4260 Dec 03 j 20:25	11° M 30'38	0°51'16
minimum elong	-4268 Nov 16 j 14:24	23° $\underline{\text{A}}$ 55'27	1°26'16	minimum elong	-4260 Dec 03 j 20:25	11° M 30'38	0°51'09
max. Earth dist.	-4268 Nov 17 j 00:14	23° $\underline{\text{A}}$ 56'23	31.17373 AU	max. Earth dist.	-4260 Dec 04 j 13:47	11° M 32'17	31.09738 AU
retrograde	-4267 Mar 01 j 14:40	26° $\underline{\text{A}}$ 26'32		retrograde	-4259 Mar 19 j 16:36	14° M 02'49	
opposition	-4267 May 21 j 09:15	25° $\underline{\text{A}}$ 02'49	1°30'06	opposition	-4259 Jun 08 j 17:00	12° M 38'24	0°52'10
min. Earth dist.	-4267 May 20 j 22:11	25° $\underline{\text{A}}$ 03'34	29.17068 AU	min. Earth dist.	-4259 Jun 07 j 23:33	12° M 39'36	29.09403 AU
direct	-4267 Aug 08 j 19:58	23° $\underline{\text{A}}$ 40'00		direct	-4259 Aug 26 j 14:01	11° M 15'38	
conjunction	-4267 Nov 19 j 00:09	26° $\underline{\text{A}}$ 07'24	1°22'20	conjunction	-4259 Dec 06 j 06:21	13° M 42'38	0°46'28
minimum elong	-4267 Nov 19 j 00:09	26° $\underline{\text{A}}$ 07'24	1°22'15	minimum elong	-4259 Dec 06 j 06:21	13° M 42'38	0°46'20
max. Earth dist.	-4267 Nov 19 j 11:30	26° $\underline{\text{A}}$ 08'29	31.16580 AU	max. Earth dist.	-4259 Dec 06 j 23:36	13° M 44'16	31.09020 AU
retrograde	-4266 Mar 04 j 01:41	28° $\underline{\text{A}}$ 38'39		retrograde	-4258 Jan 10 j 23:02	15° M	
opposition	-4266 May 23 j 22:30	27° $\underline{\text{A}}$ 14'52	1°25'45	opposition	-4258 Mar 22 j 05:57	16° M 14'58	
min. Earth dist.	-4266 May 23 j 11:17	27° $\underline{\text{A}}$ 15'38	29.16201 AU	min. Earth dist.	-4258 Jun 05 j 10:38	15° R M	
direct	-4266 Aug 11 j 07:11	25° $\underline{\text{A}}$ 52'05		opposition	-4258 Jun 10 j 11:34	14° M 51'47	29.08717 AU
conjunction	-4266 Nov 21 j 09:44	28° $\underline{\text{A}}$ 19'24	1°18'12	direct	-4258 Jun 11 j 05:57	14° M 50'31	0°46'59
minimum elong	-4266 Nov 21 j 09:44	28° $\underline{\text{A}}$ 19'25	1°18'08		-4258 Aug 29 j 00:23	13° M 27'47	
max. Earth dist.	-4266 Nov 21 j 21:03	28° $\underline{\text{A}}$ 20'29	31.15666 AU		-4258 Nov 14 j 00:07	15° M	
retrograde	-4265 Jan 08 j 18:45	0° M		conjunction	-4258 Dec 08 j 16:29	15° M 54'48	0°41'35
opposition	-4265 Mar 06 j 14:36	0° M 50'49		minimum elong	-4258 Dec 08 j 16:29	15° M 54'48	0°41'27
min. Earth dist.	-4265 May 05 j 13:44	30° R $\underline{\text{A}}$		max. Earth dist.	-4258 Dec 09 j 11:27	15° M 56'36	31.08350 AU
direct	-4265 May 26 j 11:37	29° $\underline{\text{A}}$ 26'56	1°21'16	retrograde	-4257 Mar 24 j 17:26	18° M 27'19	
opposition	-4265 May 25 j 23:03	29° $\underline{\text{A}}$ 27'47	29.15220 AU	opposition	-4257 Jun 13 j 18:54	17° M 02'50	0°41'44
min. Earth dist.	-4265 Aug 13 j 17:53	28° $\underline{\text{A}}$ 04'09		min. Earth dist.	-4257 Jun 13 j 00:21	17° M 04'06	29.08049 AU
direct	-4265 Nov 09 j 21:47	0° M		direct	-4257 Aug 31 j 11:38	15° M 40'10	
conjunction	-4265 Nov 23 j 19:31	0° M 31'25	1°13'58	conjunction	-4257 Dec 11 j 02:48	18° M 07'11	0°36'38
minimum elong	-4265 Nov 23 j 19:31	0° M 31'25	1°13'52	minimum elong	-4257 Dec 11 j 02:48	18° M 07'11	0°36'29

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Attention, astronomical year style is used: The year -4257 in astronomical counting style is the year 4258 BCE in historical counting style.

max. Earth dist.	-4257 Dec 11 j 21:49	18° \mathbb{M} 08'59	31.07689 AU	retrograde	-4249 Apr 12 j 02:51	6° \mathbb{A} 11'05	
retrograde	-4256 Mar 26 j 06:30	20° \mathbb{M} 39'52		min. Earth dist.	-4249 Jul 01 j 03:15	4° \mathbb{A} 47'37	29.00159 AU
min. Earth dist.	-4256 Jun 14 j 11:56	19° \mathbb{M} 16'43	29.07368 AU	opposition	-4249 Jul 02 j 01:15	4° \mathbb{A} 46'07	0°-1'-55
opposition	-4256 Jun 15 j 07:37	19° \mathbb{M} 15'22	0°36'25	direct	-4249 Sep 18 j 04:53	3° \mathbb{A} 23'22	
direct	-4256 Sep 01 j 21:47	17° \mathbb{M} 52'44					
				conjunction	-4249 Dec 28 j 16:56	5° \mathbb{A} 50'29	0°-4'-23
conjunction	-4256 Dec 12 j 13:17	20° \mathbb{M} 19'47	0°31'38	minimum elong	-4249 Dec 28 j 16:57	5° \mathbb{A} 50'29	0°04'35
minimum elong	-4256 Dec 12 j 13:17	20° \mathbb{M} 19'47	0°31'30	behind sun begin	-4249 Dec 28 j 10:37	5° \mathbb{A} 49'54	
max. Earth dist.	-4256 Dec 13 j 08:58	20° \mathbb{M} 21'38	31.06967 AU	behind sun end	-4249 Dec 28 j 23:16	5° \mathbb{A} 51'03	
retrograde	-4255 Mar 28 j 18:31	22° \mathbb{M} 52'38		max. Earth dist.	-4249 Dec 29 j 16:02	5° \mathbb{A} 52'39	30.99610 AU
opposition	-4255 Jun 17 j 20:36	21° \mathbb{M} 28'07	0°31'02	retrograde	-4248 Apr 13 j 14:08	8° \mathbb{A} 24'09	
min. Earth dist.	-4255 Jun 17 j 01:30	21° \mathbb{M} 29'25	29.06606 AU	opposition	-4248 Jul 03 j 13:38	6° \mathbb{A} 59'08	0°-7'-28
direct	-4255 Sep 04 j 07:45	20° \mathbb{M} 05'30		min. Earth dist.	-4248 Jul 02 j 15:30	7° \mathbb{A} 00'40	28.99147 AU
				direct	-4248 Sep 19 j 16:31	5° \mathbb{A} 36'23	
conjunction	-4255 Dec 14 j 23:48	22° \mathbb{M} 32'34	0°26'35				
minimum elong	-4255 Dec 14 j 23:48	22° \mathbb{M} 32'34	0°26'25	conjunction	-4248 Dec 30 j 03:59	8° \mathbb{A} 03'30	0°-9'-32
max. Earth dist.	-4255 Dec 15 j 19:59	22° \mathbb{M} 34'29	31.06161 AU	minimum elong	-4248 Dec 30 j 03:59	8° \mathbb{A} 03'30	0°09'43
retrograde	-4254 Mar 31 j 08:10	25° \mathbb{M} 05'35		behind sun begin	-4248 Dec 29 j 22:40	8° \mathbb{A} 03'01	
opposition	-4254 Jun 20 j 09:31	23° \mathbb{M} 41'02	0°25'36	behind sun end	-4248 Dec 30 j 09:18	8° \mathbb{A} 03'59	
min. Earth dist.	-4254 Jun 19 j 13:01	23° \mathbb{M} 42'26	29.05732 AU	max. Earth dist.	-4248 Dec 31 j 03:10	8° \mathbb{A} 05'42	30.98664 AU
direct	-4254 Sep 06 j 18:23	22° \mathbb{M} 18'25		retrograde	-4247 Apr 16 j 02:42	10° \mathbb{A} 37'18	
				min. Earth dist.	-4247 Jul 05 j 02:42	9° \mathbb{A} 13'51	28.98260 AU
conjunction	-4254 Dec 17 j 10:32	24° \mathbb{M} 45'31	0°21'29	opposition	-4247 Jul 06 j 02:05	9° \mathbb{A} 12'14	0°-12'-59
minimum elong	-4254 Dec 17 j 10:32	24° \mathbb{M} 45'31	0°21'21	direct	-4247 Sep 22 j 02:59	7° \mathbb{A} 49'28	
max. Earth dist.	-4254 Dec 18 j 06:28	24° \mathbb{M} 47'24	31.05218 AU				
retrograde	-4253 Apr 02 j 21:31	27° \mathbb{M} 18'40		conjunction	-4246 Jan 01 j 15:01	10° \mathbb{A} 16'38	0°-14'-41
opposition	-4253 Jun 22 j 22:28	25° \mathbb{M} 54'02	0°20'08	minimum elong	-4246 Jan 01 j 15:01	10° \mathbb{A} 16'38	0°14'53
min. Earth dist.	-4253 Jun 22 j 02:46	25° \mathbb{M} 55'23	29.04730 AU	behind sun begin	-4246 Jan 01 j 12:29	10° \mathbb{A} 16'25	
direct	-4253 Sep 09 j 05:19	24° \mathbb{M} 31'26		behind sun end	-4246 Jan 01 j 17:33	10° \mathbb{A} 16'52	
				max. Earth dist.	-4246 Jan 02 j 15:02	10° \mathbb{A} 18'54	30.97820 AU
conjunction	-4253 Dec 19 j 21:25	26° \mathbb{M} 58'31	0°16'22	retrograde	-4246 Apr 18 j 14:17	12° \mathbb{A} 50'34	
minimum elong	-4253 Dec 19 j 21:25	26° \mathbb{M} 58'31	0°16'12	opposition	-4246 Jul 08 j 14:40	11° \mathbb{A} 25'28	0°-18'-30
max. Earth dist.	-4253 Dec 20 j 18:28	27° \mathbb{M} 00'31	31.04160 AU	min. Earth dist.	-4246 Jul 07 j 15:40	11° \mathbb{A} 27'03	28.97472 AU
retrograde	-4252 Apr 04 j 11:27	29° \mathbb{M} 31'47		direct	-4246 Sep 24 j 12:47	10° \mathbb{A} 02'42	
opposition	-4252 Jun 24 j 11:13	28° \mathbb{M} 07'05	0°14'39				
min. Earth dist.	-4252 Jun 23 j 14:25	28° \mathbb{M} 08'31	29.03607 AU	conjunction	-4245 Jan 04 j 02:23	12° \mathbb{A} 29'55	0°-19'-50
direct	-4252 Sep 10 j 18:12	26° \mathbb{M} 44'27		minimum elong	-4245 Jan 04 j 02:22	12° \mathbb{A} 29'55	0°20'01
				max. Earth dist.	-4245 Jan 05 j 03:03	12° \mathbb{A} 32'15	30.97084 AU
conjunction	-4252 Dec 21 j 08:07	29° \mathbb{M} 11'33	0°11'14	retrograde	-4245 Apr 21 j 03:52	15° \mathbb{A} 03'57	
minimum elong	-4252 Dec 21 j 08:07	29° \mathbb{M} 11'33	0°11'04	min. Earth dist.	-4245 Jul 10 j 02:34	13° \mathbb{A} 40'32	28.96768 AU
behind sun begin	-4252 Dec 21 j 03:16	29° \mathbb{M} 11'06		opposition	-4245 Jul 11 j 02:56	13° \mathbb{A} 38'51	0°-24'00
behind sun end	-4252 Dec 21 j 12:58	29° \mathbb{M} 11'59		direct	-4245 Sep 26 j 23:02	12° \mathbb{A} 16'05	
max. Earth dist.	-4252 Dec 22 j 04:33	29° \mathbb{M} 13'28	31.02999 AU				
	-4251 Jan 12 j 00:41	0° \mathbb{A}		conjunction	-4244 Jan 06 j 13:49	14° \mathbb{A} 43'23	0°-24'-57
retrograde	-4251 Apr 07 j 00:42	1° \mathbb{A} 44'55		minimum elong	-4244 Jan 06 j 13:48	14° \mathbb{A} 43'23	0°25'10
opposition	-4251 Jun 26 j 23:59	0° \mathbb{A} 20'08	0°09'08	max. Earth dist.	-4244 Jan 07 j 14:19	14° \mathbb{A} 45'41	30.96395 AU
min. Earth dist.	-4251 Jun 26 j 03:29	0° \mathbb{A} 21'32	29.02431 AU	retrograde	-4244 Apr 22 j 16:42	17° \mathbb{A} 17'32	
	-4251 Jul 09 j 08:12	30° \mathbb{R} \mathbb{M}		opposition	-4244 Jul 12 j 15:27	15° \mathbb{A} 52'25	0°-29'-28
direct	-4251 Sep 13 j 04:42	28° \mathbb{M} 57'27		min. Earth dist.	-4244 Jul 11 j 15:55	15° \mathbb{A} 54'03	28.96098 AU
	-4251 Nov 14 j 05:04	0° \mathbb{A}		direct	-4244 Sep 28 j 09:20	14° \mathbb{A} 29'40	
conjunction	-4251 Dec 23 j 19:02	1° \mathbb{A} 24'32	0°06'05	conjunction	-4243 Jan 08 j 01:26	16° \mathbb{A} 57'01	0°-30'-3
minimum elong	-4251 Dec 23 j 19:02	1° \mathbb{A} 24'32	0°05'54	minimum elong	-4243 Jan 08 j 01:26	16° \mathbb{A} 57'01	0°30'15
behind sun begin	-4251 Dec 23 j 12:53	1° \mathbb{A} 23'59		max. Earth dist.	-4243 Jan 09 j 03:03	16° \mathbb{A} 59'26	30.95722 AU
behind sun end	-4251 Dec 24 j 01:12	1° \mathbb{A} 25'05		retrograde	-4243 Apr 25 j 06:19	19° \mathbb{A} 31'17	
max. Earth dist.	-4251 Dec 24 j 17:03	1° \mathbb{A} 26'37	31.01817 AU	min. Earth dist.	-4243 Jul 14 j 03:21	18° \mathbb{A} 07'51	28.95408 AU
retrograde	-4250 Apr 09 j 12:39	3° \mathbb{A} 58'00		opposition	-4243 Jul 15 j 03:47	18° \mathbb{A} 06'09	0°-34'-53
opposition	-4250 Jun 29 j 12:37	2° \mathbb{A} 33'08	0°03'36	direct	-4243 Sep 30 j 21:06	16° \mathbb{A} 43'24	
min. Earth dist.	-4250 Jun 28 j 15:14	2° \mathbb{A} 34'36	29.01257 AU				
direct	-4250 Sep 15 j 17:34	1° \mathbb{A} 10'25		conjunction	-4242 Jan 10 j 13:11	19° \mathbb{A} 10'50	0°-35'-5
				minimum elong	-4242 Jan 10 j 13:10	19° \mathbb{A} 10'50	0°35'19
conjunction	-4250 Dec 26 j 05:51	3° \mathbb{A} 37'30	0°00'52	max. Earth dist.	-4242 Jan 11 j 13:49	19° \mathbb{A} 13'09	30.95004 AU
minimum elong	-4250 Dec 26 j 05:50	3° \mathbb{A} 37'30	0°00'42	retrograde	-4242 Apr 27 j 20:26	21° \mathbb{A} 45'12	
behind sun begin	-4250 Dec 25 j 23:24	3° \mathbb{A} 36'55		opposition	-4242 Jul 17 j 16:17	20° \mathbb{A} 20'03	0°-40'-16
behind sun end	-4250 Dec 26 j 12:16	3° \mathbb{A} 38'05		min. Earth dist.	-4242 Jul 16 j 16:37	20° \mathbb{A} 21'41	28.94667 AU
max. Earth dist.	-4250 Dec 27 j 03:28	3° \mathbb{A} 39'32	31.00675 AU	direct	-4242 Oct 03 j 07:00	18° \mathbb{A} 57'16	
desc. node	-4249 Feb 24 j 01:42	5° \mathbb{A} 36'13					

Attention, astronomical year style is used: The year -4241 in astronomical counting style is the year 4242 BCE in historical counting style.

conjunction	-4241 Jan 13 j 01:15	21° \mathring{A} 24'46	0°-40'-5	conjunction	-4233 Jan 31 j 03:20	9° \mathring{B} 16'01	-1°-17'-19
minimum elong	-4241 Jan 13 j 01:15	21° \mathring{A} 24'46	0°40'17	minimum elong	-4233 Jan 31 j 03:20	9° \mathring{B} 16'01	1°17'31
max. Earth dist.	-4241 Jan 14 j 02:51	21° \mathring{A} 27'10	30.94207 AU	max. Earth dist.	-4233 Feb 01 j 04:41	9° \mathring{B} 18'24	30.87425 AU
retrograde	-4241 Apr 30 j 09:52	23° \mathring{A} 59'13		retrograde	-4233 May 18 j 18:02	11° \mathring{B} 50'51	
min. Earth dist.	-4241 Jul 19 j 04:46	22° \mathring{A} 35'40	28.93814 AU	min. Earth dist.	-4233 Aug 06 j 05:13	10° \mathring{B} 27'01	28.87307 AU
opposition	-4241 Jul 20 j 04:40	22° \mathring{A} 34'01	0°-45'-35	opposition	-4233 Aug 07 j 05:02	10° \mathring{B} 25'21	-1°-25'00
direct	-4241 Oct 05 j 20:09	21° \mathring{A} 11'11		direct	-4233 Oct 23 j 11:44	9° \mathring{B} 02'09	
conjunction	-4240 Jan 15 j 13:19	23° \mathring{A} 38'45	0°-45'-2	conjunction	-4232 Feb 02 j 16:09	11° \mathring{B} 30'16	-1°-21'-32
minimum elong	-4240 Jan 15 j 13:19	23° \mathring{A} 38'45	0°45'15	minimum elong	-4232 Feb 02 j 16:08	11° \mathring{B} 30'16	1°21'45
max. Earth dist.	-4240 Jan 16 j 13:40	23° \mathring{A} 41'02	30.93304 AU	max. Earth dist.	-4232 Feb 03 j 18:34	11° \mathring{B} 32'45	30.87027 AU
retrograde	-4240 May 02 j 00:57	26° \mathring{A} 13'15		retrograde	-4232 May 20 j 07:37	14° \mathring{B} 05'09	
opposition	-4240 Jul 21 j 16:55	24° \mathring{A} 47'59	0°-50'-49	opposition	-4232 Aug 08 j 16:44	12° \mathring{B} 39'42	-1°-29'-26
min. Earth dist.	-4240 Jul 20 j 17:11	24° \mathring{A} 49'38	28.92869 AU	min. Earth dist.	-4232 Aug 07 j 16:39	12° \mathring{B} 41'23	28.86949 AU
direct	-4240 Oct 07 j 07:49	23° \mathring{A} 25'06		direct	-4232 Oct 25 j 00:22	11° \mathring{B} 16'30	
conjunction	-4239 Jan 17 j 01:30	25° \mathring{A} 52'42	0°-49'-54	conjunction	-4231 Feb 04 j 04:57	13° \mathring{B} 44'45	-1°-25'-37
minimum elong	-4239 Jan 17 j 01:30	25° \mathring{A} 52'42	0°50'06	minimum elong	-4231 Feb 04 j 04:56	13° \mathring{B} 44'45	1°25'49
max. Earth dist.	-4239 Jan 18 j 02:40	25° \mathring{A} 55'05	30.92311 AU	max. Earth dist.	-4231 Feb 05 j 06:10	13° \mathring{B} 47'07	30.86704 AU
retrograde	-4239 May 04 j 12:33	28° \mathring{A} 27'15		retrograde	-4231 May 22 j 23:14	16° \mathring{B} 19'42	
min. Earth dist.	-4239 Jul 23 j 05:53	27° \mathring{A} 03'33	28.91851 AU	min. Earth dist.	-4231 Aug 10 j 04:44	14° \mathring{B} 55'56	28.86654 AU
opposition	-4239 Jul 24 j 05:13	27° \mathring{A} 01'55	0°-56'00	opposition	-4231 Aug 11 j 04:34	14° \mathring{B} 54'16	-1°-33'-44
direct	-4239 Oct 09 j 19:59	25° \mathring{A} 38'59		direct	-4231 Oct 27 j 11:41	13° \mathring{B} 31'04	
conjunction	-4238 Jan 19 j 13:31	28° \mathring{A} 06'36	0°-54'-42	conjunction	-4230 Feb 06 j 17:58	15° \mathring{B} 59'27	-1°-29'-35
minimum elong	-4238 Jan 19 j 13:30	28° \mathring{A} 06'36	0°54'55	minimum elong	-4230 Feb 06 j 17:57	15° \mathring{B} 59'27	1°29'48
max. Earth dist.	-4238 Jan 20 j 14:15	28° \mathring{A} 08'56	30.91292 AU	max. Earth dist.	-4230 Feb 07 j 19:51	16° \mathring{B} 01'53	30.86395 AU
retrograde	-4238 Mar 16 j 19:09	0° \mathring{B}		retrograde	-4230 May 25 j 11:41	18° \mathring{B} 34'28	
opposition	-4238 May 07 j 02:11	0° \mathring{B} 41'11		opposition	-4230 Aug 13 j 16:24	17° \mathring{B} 09'04	-1°-37'-54
min. Earth dist.	-4238 Jun 28 j 20:25	30° \mathring{R} \mathring{A}		min. Earth dist.	-4230 Aug 12 j 17:23	17° \mathring{B} 10'41	28.86334 AU
direct	-4238 Jul 26 j 17:22	29° \mathring{A} 15'47	-1°-1'-5	direct	-4230 Oct 29 j 23:26	15° \mathring{B} 45'51	
conjunction	-4237 Jan 13 j 00:32	0° \mathring{B}		conjunction	-4229 Feb 09 j 07:16	18° \mathring{B} 14'21	-1°-33'-24
minimum elong	-4237 Jan 22 j 01:46	0° \mathring{B} 20'26	0°-59'-25	minimum elong	-4229 Feb 09 j 07:16	18° \mathring{B} 14'21	1°33'36
max. Earth dist.	-4237 Jan 22 j 01:46	0° \mathring{B} 20'26	0°59'37	max. Earth dist.	-4229 Feb 10 j 08:01	18° \mathring{B} 16'41	30.86051 AU
retrograde	-4237 Jan 23 j 02:52	0° \mathring{B} 22'48	30.90289 AU	retrograde	-4229 May 28 j 03:01	20° \mathring{B} 49'23	
min. Earth dist.	-4237 May 09 j 14:02	2° \mathring{B} 55'03		min. Earth dist.	-4229 Aug 15 j 05:04	19° \mathring{B} 25'38	28.85957 AU
opposition	-4237 Jul 28 j 06:16	1° \mathring{B} 31'12	28.89885 AU	opposition	-4229 Aug 16 j 04:05	19° \mathring{B} 24'01	-1°-41'-55
direct	-4237 Jul 29 j 05:22	1° \mathring{B} 29'36	-1°-6'-4	direct	-4229 Nov 01 j 11:23	18° \mathring{B} 00'46	
conjunction	-4237 Oct 14 j 18:02	0° \mathring{B} 06'31		conjunction	-4228 Feb 11 j 20:42	20° \mathring{B} 29'23	-1°-37'-6
minimum elong	-4236 Jan 24 j 14:07	2° \mathring{B} 34'14	-1°-4'-2	minimum elong	-4228 Feb 11 j 20:42	20° \mathring{B} 29'23	1°37'18
max. Earth dist.	-4236 Jan 24 j 14:07	2° \mathring{B} 34'14	1°04'15	max. Earth dist.	-4228 Feb 12 j 21:05	20° \mathring{B} 31'41	30.85611 AU
retrograde	-4236 Jan 25 j 15:31	2° \mathring{B} 36'38	30.89380 AU	retrograde	-4228 May 29 j 16:10	23° \mathring{B} 04'26	
opposition	-4236 May 11 j 03:13	5° \mathring{B} 08'53		opposition	-4228 Aug 17 j 15:57	21° \mathring{B} 39'03	-1°-45'-47
min. Earth dist.	-4236 Jul 30 j 17:17	3° \mathring{B} 43'24	-1°-10'-58	min. Earth dist.	-4228 Aug 16 j 18:23	21° \mathring{B} 40'34	28.85478 AU
direct	-4236 Jul 29 j 16:59	3° \mathring{B} 45'06	28.89036 AU	direct	-4228 Nov 02 j 22:45	20° \mathring{B} 15'46	
conjunction	-4236 Oct 16 j 05:03	2° \mathring{B} 20'16		conjunction	-4227 Feb 13 j 10:03	22° \mathring{B} 44'27	-1°-40'-38
minimum elong	-4235 Jan 26 j 02:18	4° \mathring{B} 48'04	-1°-8'-34	minimum elong	-4227 Feb 13 j 10:03	22° \mathring{B} 44'27	1°40'49
max. Earth dist.	-4235 Jan 26 j 02:17	4° \mathring{B} 48'03	1°08'46	max. Earth dist.	-4227 Feb 14 j 09:54	22° \mathring{B} 46'42	30.85092 AU
retrograde	-4235 Jan 27 j 03:26	4° \mathring{B} 50'26	30.88581 AU	retrograde	-4227 Jun 01 j 05:24	25° \mathring{B} 19'28	
min. Earth dist.	-4235 May 13 j 15:01	7° \mathring{B} 22'46		min. Earth dist.	-4227 Aug 19 j 05:35	23° \mathring{B} 55'38	28.84922 AU
opposition	-4235 Aug 01 j 05:47	5° \mathring{B} 58'54	28.88319 AU	opposition	-4227 Aug 20 j 03:39	23° \mathring{B} 54'05	-1°-49'-29
direct	-4235 Aug 02 j 05:19	5° \mathring{B} 57'15	-1°-15'-46	direct	-4227 Nov 05 j 10:52	22° \mathring{B} 30'43	
conjunction	-4235 Oct 18 j 15:08	4° \mathring{B} 34'05		conjunction	-4226 Feb 15 j 23:31	24° \mathring{B} 59'28	-1°-44'-1
minimum elong	-4234 Jan 28 j 14:50	7° \mathring{B} 01'58	-1°-13'00	minimum elong	-4226 Feb 15 j 23:30	24° \mathring{B} 59'28	1°44'14
max. Earth dist.	-4234 Jan 28 j 14:50	7° \mathring{B} 01'58	1°13'13	max. Earth dist.	-4226 Feb 16 j 22:23	25° \mathring{B} 01'37	30.84504 AU
retrograde	-4234 Jan 29 j 17:03	7° \mathring{B} 04'26	30.87935 AU	retrograde	-4226 Jun 03 j 16:50	27° \mathring{B} 34'28	
opposition	-4234 May 16 j 04:06	9° \mathring{B} 36'44		opposition	-4226 Aug 22 j 15:18	26° \mathring{B} 09'02	-1°-53'-2
min. Earth dist.	-4234 Aug 04 j 17:06	8° \mathring{B} 11'13	-1°-20'-26	min. Earth dist.	-4226 Aug 21 j 18:45	26° \mathring{B} 10'29	28.84334 AU
direct	-4234 Aug 03 j 16:36	8° \mathring{B} 12'56	28.87746 AU	direct	-4226 Nov 07 j 21:16	24° \mathring{B} 45'35	
conjunction	-4234 Oct 21 j 02:22	6° \mathring{B} 48'01		conjunction	-4225 Feb 18 j 13:10	27° \mathring{B} 14'25	-1°-47'-15
minimum elong				minimum elong	-4225 Feb 18 j 13:10	27° \mathring{B} 14'24	1°47'27
max. Earth dist.				max. Earth dist.	-4225 Feb 19 j 12:24	27° \mathring{B} 16'36	30.83918 AU

Attention, astronomical year style is used: The year -4225 in astronomical counting style is the year 4226 BCE in historical counting style.

retrograde	-4225 Jun 06 j 05:41	29° $\overline{3}$ 49'20		conjunction	-4217 Mar 09 j 03:54	15° \approx 13'33	-2°-6'-51
min. Earth dist.	-4225 Aug 24 j 05:46	28° $\overline{3}$ 25'22	28.83761 AU	minimum elong	-4217 Mar 09 j 03:54	15° \approx 13'33	2°07'01
opposition	-4225 Aug 25 j 02:45	28° $\overline{3}$ 23'53	-1°-56'-24	max. Earth dist.	-4217 Mar 09 j 22:45	15° \approx 15'19	30.82660 AU
direct	-4225 Nov 10 j 08:50	27° $\overline{3}$ 00'20		retrograde	-4217 Jun 24 j 16:09	17° \approx 48'11	
				opposition	-4217 Sep 11 j 21:13	16° \approx 22'59	-2°-16'-34
conjunction	-4224 Feb 21 j 02:39	29° $\overline{3}$ 29'14	-1°-50'-19	min. Earth dist.	-4217 Sep 11 j 04:59	16° \approx 24'09	28.82855 AU
minimum elong	-4224 Feb 21 j 02:39	29° $\overline{3}$ 29'14	1°50'31		-4217 Nov 21 j 01:04	15° \approx	
max. Earth dist.	-4224 Feb 22 j 00:34	29° $\overline{3}$ 31'18	30.83367 AU	direct	-4217 Nov 28 j 04:35	14° \approx 59'08	
	-4224 Mar 05 j 20:17	0° \approx			-4217 Dec 05 j 06:33	15° \approx	
retrograde	-4224 Jun 07 j 18:08	2° \approx 04'07					
opposition	-4224 Aug 26 j 14:11	0° \approx 38'39	-1°-59'-35	conjunction	-4216 Mar 10 j 18:19	17° \approx 28'59	-2°-8'-28
min. Earth dist.	-4224 Aug 25 j 18:16	0° \approx 40'03	28.83267 AU	minimum elong	-4216 Mar 10 j 18:19	17° \approx 28'59	2°08'37
	-4224 Sep 19 j 06:42	30° \approx 18'30		max. Earth dist.	-4216 Mar 11 j 12:50	17° \approx 30'43	30.82692 AU
direct	-4224 Nov 11 j 18:45	29° $\overline{3}$ 15'00		retrograde	-4216 Jun 26 j 05:47	20° \approx 03'34	
	-4223 Jan 02 j 19:50	0° \approx		opposition	-4216 Sep 13 j 08:22	18° \approx 38'26	-2°-18'-10
				min. Earth dist.	-4216 Sep 12 j 16:11	18° \approx 39'34	28.82835 AU
conjunction	-4223 Feb 22 j 16:20	1° \approx 43'59	-1°-53'-13	direct	-4216 Nov 29 j 16:17	17° \approx 14'31	
minimum elong	-4223 Feb 22 j 16:20	1° \approx 43'59	1°53'24				
max. Earth dist.	-4223 Feb 23 j 15:03	1° \approx 46'07	30.82918 AU	conjunction	-4215 Mar 13 j 08:41	19° \approx 44'30	-2°-9'-53
retrograde	-4223 Jun 10 j 06:14	4° \approx 18'49		minimum elong	-4215 Mar 13 j 08:41	19° \approx 44'30	2°10'01
min. Earth dist.	-4223 Aug 28 j 05:27	2° \approx 54'45	28.82884 AU	max. Earth dist.	-4215 Mar 14 j 01:12	19° \approx 46'02	30.82623 AU
opposition	-4223 Aug 29 j 01:31	2° \approx 53'20	-2°-2'-35	retrograde	-4215 Jun 28 j 17:48	22° \approx 19'01	
direct	-4223 Nov 14 j 07:29	1° \approx 29'37		opposition	-4215 Sep 15 j 19:37	20° \approx 53'54	-2°-19'-35
				min. Earth dist.	-4215 Sep 15 j 05:06	20° \approx 54'55	28.82728 AU
conjunction	-4222 Feb 25 j 05:52	3° \approx 58'42	-1°-55'-57	direct	-4215 Dec 02 j 02:28	19° \approx 29'55	
minimum elong	-4222 Feb 25 j 05:52	3° \approx 58'42	1°56'08				
max. Earth dist.	-4222 Feb 26 j 03:12	4° \approx 00'42	30.82604 AU	conjunction	-4214 Mar 15 j 23:14	21° \approx 59'59	-2°-11'-6
retrograde	-4222 Jun 12 j 20:31	6° \approx 33'29		minimum elong	-4214 Mar 15 j 23:15	21° \approx 59'59	2°11'15
opposition	-4222 Aug 31 j 12:54	5° \approx 08'00	-2°-5'-25	max. Earth dist.	-4214 Mar 16 j 15:48	22° \approx 01'32	30.82472 AU
min. Earth dist.	-4222 Aug 30 j 17:06	5° \approx 09'24	28.82648 AU	retrograde	-4214 Jul 01 j 05:22	24° \approx 34'24	
direct	-4222 Nov 16 j 18:35	3° \approx 44'13		opposition	-4214 Sep 18 j 06:42	23° \approx 09'19	-2°-20'-46
				min. Earth dist.	-4214 Sep 17 j 16:43	23° \approx 10'18	28.82536 AU
conjunction	-4221 Feb 27 j 19:46	6° \approx 13'25	-1°-58'-30	direct	-4214 Dec 04 j 15:25	21° \approx 45'15	
minimum elong	-4221 Feb 27 j 19:46	6° \approx 13'25	1°58'40				
max. Earth dist.	-4221 Feb 28 j 17:43	6° \approx 15'28	30.82424 AU	conjunction	-4213 Mar 18 j 13:42	24° \approx 15'25	-2°-12'-7
retrograde	-4221 Jun 15 j 08:52	8° \approx 48'09		minimum elong	-4213 Mar 18 j 13:42	24° \approx 15'25	2°12'15
min. Earth dist.	-4221 Sep 02 j 05:00	7° \approx 24'04	28.82538 AU	max. Earth dist.	-4213 Mar 19 j 04:05	24° \approx 16'46	30.82265 AU
opposition	-4221 Sep 03 j 00:06	7° \approx 22'43	-2°-8'-2	retrograde	-4213 Jul 03 j 18:44	26° \approx 49'44	
direct	-4221 Nov 19 j 06:13	5° \approx 58'54		opposition	-4213 Sep 20 j 17:38	25° \approx 24'38	-2°-21'-45
				min. Earth dist.	-4213 Sep 20 j 04:32	25° \approx 25'34	28.82329 AU
conjunction	-4220 Mar 01 j 09:36	8° \approx 28'13	-2°00'-52	direct	-4213 Dec 07 j 02:31	24° \approx 00'28	
minimum elong	-4220 Mar 01 j 09:36	8° \approx 28'13	2°01'03				
max. Earth dist.	-4220 Mar 02 j 06:29	8° \approx 30'10	30.82386 AU	conjunction	-4212 Mar 20 j 04:15	26° \approx 30'44	-2°-12'-56
retrograde	-4220 Jun 17 j 00:18	11° \approx 02'55		minimum elong	-4212 Mar 20 j 04:16	26° \approx 30'44	2°13'04
opposition	-4220 Sep 04 j 11:22	9° \approx 37'32	-2°-10'-28	max. Earth dist.	-4212 Mar 20 j 18:52	26° \approx 32'06	30.82058 AU
min. Earth dist.	-4220 Sep 03 j 16:05	9° \approx 38'54	28.82560 AU	retrograde	-4212 Jul 05 j 06:23	29° \approx 04'56	
direct	-4220 Nov 20 j 18:28	8° \approx 13'42		opposition	-4212 Sep 22 j 04:36	27° \approx 39'50	-2°-22'-31
				min. Earth dist.	-4212 Sep 21 j 16:29	27° \approx 40'42	28.82143 AU
conjunction	-4219 Mar 03 j 23:26	10° \approx 43'09	-2°-3'-3	direct	-4212 Dec 08 j 14:21	26° \approx 15'36	
minimum elong	-4219 Mar 03 j 23:26	10° \approx 43'09	2°03'13				
max. Earth dist.	-4219 Mar 04 j 20:19	10° \approx 45'06	30.82443 AU	conjunction	-4211 Mar 22 j 18:29	28° \approx 45'56	-2°-13'-33
retrograde	-4219 Jun 19 j 13:13	13° \approx 17'51		minimum elong	-4211 Mar 22 j 18:29	28° \approx 45'56	2°13'40
opposition	-4219 Sep 06 j 22:45	11° \approx 52'30	-2°-12'-42	max. Earth dist.	-4211 Mar 23 j 07:36	28° \approx 47'10	30.81916 AU
min. Earth dist.	-4219 Sep 06 j 04:52	11° \approx 53'46	28.82656 AU		-4211 Apr 26 j 03:48	0° \approx	
direct	-4219 Nov 23 j 06:00	10° \approx 28'41		retrograde	-4211 Jul 07 j 20:53	1° \approx 20'00	
					-4211 Sep 21 j 16:01	30° \approx	
conjunction	-4218 Mar 06 j 13:35	12° \approx 58'16	-2°-5'-3	opposition	-4211 Sep 24 j 15:27	29° \approx 54'55	-2°-23'-4
minimum elong	-4218 Mar 06 j 13:35	12° \approx 58'16	2°05'13	min. Earth dist.	-4211 Sep 24 j 03:23	29° \approx 55'47	28.82049 AU
max. Earth dist.	-4218 Mar 07 j 09:44	13° \approx 00'09	30.82564 AU	direct	-4211 Dec 11 j 03:42	28° \approx 30'36	
	-4218 May 07 j 17:47	15° \approx			-4210 Feb 25 j 09:24	0° \approx	
retrograde	-4218 Jun 22 j 03:29	15° \approx 32'56					
	-4218 Aug 07 j 04:38	15° \approx		conjunction	-4210 Mar 25 j 09:00	1° \approx 01'02	-2°-13'-57
opposition	-4218 Sep 09 j 09:50	14° \approx 07'40	-2°-14'-44	minimum elong	-4210 Mar 25 j 09:01	1° \approx 01'02	2°14'04
min. Earth dist.	-4218 Sep 08 j 15:45	14° \approx 08'57	28.82779 AU	max. Earth dist.	-4210 Mar 25 j 22:02	1° \approx 02'15	30.81867 AU
direct	-4218 Nov 25 j 18:10	12° \approx 43'49		retrograde	-4210 Jul 10 j 08:37	3° \approx 34'59	
	-4217 Mar 03 j 03:08	15° \approx		opposition	-4210 Sep 27 j 02:15	2° \approx 09'55	-2°-23'-23
				min. Earth dist.	-4210 Sep 26 j 15:39	2° \approx 10'40	28.82067 AU

Attention, astronomical year style is used: The year -4210 in astronomical counting style is the year 4211 BCE in historical counting style.

direct	-4210 Dec 13 j 16:02	0° H 45'31		minimum elong	-4201 Apr 15 j 20:50	21° H 16'55	2°08'29
				max. Earth dist.	-4201 Apr 16 j 01:00	21° H 17'18	30.85139 AU
conjunction	-4209 Mar 27 j 23:32	3° H 16'03	-2°-14'-10	retrograde	-4201 Jul 31 j 00:28	23° H 49'43	
minimum elong	-4209 Mar 27 j 23:32	3° H 16'03	2°14'16	opposition	-4201 Oct 17 j 02:37	22° H 25'12	-2°-16'-29
max. Earth dist.	-4209 Mar 28 j 11:38	3° H 17'11	30.81964 AU	min. Earth dist.	-4201 Oct 16 j 23:58	22° H 25'23	28.85415 AU
retrograde	-4209 Jul 12 j 22:42	5° H 49'52		direct	-4200 Jan 03 j 02:48	21° H 00'24	
opposition	-4209 Sep 29 j 12:59	4° H 24'51	-2°-23'-30				
min. Earth dist.	-4209 Sep 29 j 01:56	4° H 25'39	28.82233 AU	conjunction	-4200 Apr 17 j 11:20	23° H 31'47	-2°-6'-49
direct	-4209 Dec 16 j 04:52	3° H 00'24		minimum elong	-4200 Apr 17 j 11:21	23° H 31'47	2°06'51
				max. Earth dist.	-4200 Apr 17 j 14:06	23° H 32'03	30.85397 AU
conjunction	-4208 Mar 29 j 13:53	5° H 31'02	-2°-14'-9	retrograde	-4200 Aug 01 j 13:56	26° H 04'25	
minimum elong	-4208 Mar 29 j 13:53	5° H 31'02	2°14'16	opposition	-4200 Oct 18 j 13:06	24° H 39'55	-2°-14'-39
max. Earth dist.	-4208 Mar 30 j 01:10	5° H 32'06	30.82195 AU	min. Earth dist.	-4200 Oct 18 j 10:19	24° H 40'07	28.85671 AU
retrograde	-4208 Jul 14 j 11:29	8° H 04'45		direct	-4199 Jan 04 j 16:15	23° H 15'03	
opposition	-4208 Sep 30 j 23:49	6° H 39'47	-2°-23'-23				
min. Earth dist.	-4208 Sep 30 j 14:15	6° H 40'28	28.82542 AU	conjunction	-4199 Apr 20 j 01:54	25° H 46'30	-2°-5'-1
direct	-4208 Dec 17 j 15:54	5° H 15'19		minimum elong	-4199 Apr 20 j 01:55	25° H 46'30	2°05'03
				max. Earth dist.	-4199 Apr 20 j 03:40	25° H 46'40	30.85671 AU
conjunction	-4207 Apr 01 j 04:26	7° H 46'03	-2°-13'-57	retrograde	-4199 Aug 04 j 02:04	28° H 18'57	
minimum elong	-4207 Apr 01 j 04:26	7° H 46'03	2°14'03	opposition	-4199 Oct 20 j 23:33	26° H 54'29	-2°-12'-38
max. Earth dist.	-4207 Apr 01 j 15:33	7° H 47'05	30.82581 AU	min. Earth dist.	-4199 Oct 20 j 22:33	26° H 54'33	28.85980 AU
retrograde	-4207 Jul 17 j 01:04	10° H 19'39		direct	-4198 Jan 07 j 04:09	25° H 29'32	
opposition	-4207 Oct 03 j 10:25	8° H 54'46	-2°-23'-3				
min. Earth dist.	-4207 Oct 03 j 00:41	8° H 55'27	28.82976 AU	conjunction	-4198 Apr 22 j 16:29	28° H 01'03	-2°-3'-1
direct	-4207 Dec 20 j 04:11	7° H 30'16		minimum elong	-4198 Apr 22 j 16:29	28° H 01'03	2°03'03
				max. Earth dist.	-4198 Apr 22 j 17:43	28° H 01'10	30.86030 AU
conjunction	-4206 Apr 03 j 18:58	10° H 01'07	-2°-13'-32		-4198 Jun 22 j 11:07	0° Y	
minimum elong	-4206 Apr 03 j 18:58	10° H 01'07	2°13'38	retrograde	-4198 Aug 06 j 14:51	0° Y 33'19	
max. Earth dist.	-4206 Apr 04 j 04:27	10° H 02'00	30.83061 AU		-4198 Sep 21 j 07:16	30° R H	
retrograde	-4206 Jul 19 j 12:38	12° H 34'37		opposition	-4198 Oct 23 j 09:54	29° H 08'54	-2°-10'-25
opposition	-4206 Oct 05 j 21:11	11° H 09'49	-2°-22'-29	min. Earth dist.	-4198 Oct 23 j 08:46	29° H 08'59	28.86376 AU
min. Earth dist.	-4206 Oct 05 j 13:01	11° H 10'24	28.83488 AU	direct	-4197 Jan 09 j 17:34	27° H 43'54	
direct	-4206 Dec 22 j 14:35	9° H 45'18			-4197 Apr 18 j 08:27	0° Y	
conjunction	-4205 Apr 06 j 09:46	12° H 16'17	-2°-12'-55	conjunction	-4197 Apr 25 j 06:54	0° Y 15'28	-2°00'-51
minimum elong	-4205 Apr 06 j 09:47	12° H 16'17	2°13'00	minimum elong	-4197 Apr 25 j 06:55	0° Y 15'28	2°00'53
max. Earth dist.	-4205 Apr 06 j 19:15	12° H 17'10	30.83584 AU	max. Earth dist.	-4197 Apr 25 j 06:40	0° Y 15'27	30.86488 AU
retrograde	-4205 Jul 22 j 00:15	14° H 49'40		retrograde	-4197 Aug 09 j 01:59	2° Y 47'35	
opposition	-4205 Oct 08 j 07:48	13° H 24'57	-2°-21'-43	opposition	-4197 Oct 25 j 20:19	1° Y 23'14	-2°-7'-59
min. Earth dist.	-4205 Oct 08 j 00:18	13° H 25'29	28.83998 AU	min. Earth dist.	-4197 Oct 25 j 20:29	1° Y 23'13	28.86909 AU
direct	-4205 Dec 25 j 02:48	12° H 00'25			-4196 Jan 01 j 19:03	30° R H	
				direct	-4196 Jan 12 j 04:26	29° H 58'11	
conjunction	-4204 Apr 08 j 00:27	14° H 31'30	-2°-12'-5		-4196 Jan 22 j 11:34	0° Y	
minimum elong	-4204 Apr 08 j 00:28	14° H 31'30	2°12'09				
max. Earth dist.	-4204 Apr 08 j 07:35	14° H 32'10	30.84081 AU	conjunction	-4196 Apr 26 j 21:23	2° Y 29'50	-1°-58'-30
retrograde	-4204 Jul 23 j 13:23	17° H 04'46		minimum elong	-4196 Apr 26 j 21:23	2° Y 29'50	1°58'31
opposition	-4204 Oct 09 j 18:35	15° H 40'08	-2°-20'-43	max. Earth dist.	-4196 Apr 26 j 21:25	2° Y 29'50	30.87100 AU
min. Earth dist.	-4204 Oct 09 j 12:05	15° H 40'35	28.84472 AU	retrograde	-4196 Aug 10 j 13:21	5° Y 01'47	
direct	-4204 Dec 26 j 13:11	14° H 15'32		opposition	-4196 Oct 27 j 06:41	3° Y 37'31	-2°-5'-22
				min. Earth dist.	-4196 Oct 27 j 07:05	3° Y 37'29	28.87588 AU
conjunction	-4203 Apr 10 j 15:12	16° H 46'43	-2°-11'-4	direct	-4195 Jan 13 j 16:40	2° Y 12'27	
minimum elong	-4203 Apr 10 j 15:12	16° H 46'43	2°11'08				
max. Earth dist.	-4203 Apr 10 j 22:08	16° H 47'22	30.84512 AU	conjunction	-4195 Apr 29 j 11:35	4° Y 44'11	-1°-55'-58
retrograde	-4203 Jul 26 j 00:11	19° H 19'51		minimum elong	-4195 Apr 29 j 11:36	4° Y 44'11	1°55'59
opposition	-4203 Oct 12 j 05:22	17° H 55'16	-2°-19'-31	max. Earth dist.	-4195 Apr 29 j 09:47	4° Y 44'01	30.87865 AU
min. Earth dist.	-4203 Oct 12 j 00:18	17° H 55'38	28.84851 AU	retrograde	-4195 Aug 13 j 01:45	7° Y 16'00	
direct	-4203 Dec 29 j 01:18	16° H 30'37		opposition	-4195 Oct 29 j 17:04	5° Y 51'50	-2°-2'-34
				min. Earth dist.	-4195 Oct 29 j 18:05	5° Y 51'45	28.88420 AU
conjunction	-4202 Apr 13 j 05:59	19° H 01'52	-2°-9'-50	direct	-4194 Jan 16 j 02:35	4° Y 26'45	
minimum elong	-4202 Apr 13 j 05:59	19° H 01'52	2°09'54				
max. Earth dist.	-4202 Apr 13 j 10:39	19° H 02'19	30.84863 AU	conjunction	-4194 May 02 j 02:09	6° Y 58'35	-1°-53'-15
retrograde	-4202 Jul 28 j 13:25	21° H 34'51		minimum elong	-4194 May 02 j 02:09	6° Y 58'35	1°53'15
opposition	-4202 Oct 14 j 15:56	20° H 10'18	-2°-18'-6	max. Earth dist.	-4194 May 02 j 00:34	6° Y 58'26	30.88758 AU
min. Earth dist.	-4202 Oct 14 j 11:23	20° H 10'38	28.85161 AU	retrograde	-4194 Aug 15 j 11:37	9° Y 30'16	
direct	-4202 Dec 31 j 14:25	18° H 45'35		opposition	-4194 Nov 01 j 03:23	8° Y 06'13	-1°-59'-34
				min. Earth dist.	-4194 Nov 01 j 05:35	8° Y 06'04	28.89346 AU
conjunction	-4201 Apr 15 j 20:50	21° H 16'55	-2°-8'-25	direct	-4193 Jan 18 j 14:17	6° Y 41'10	

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Attention, astronomical year style is used: The year -4193 in astronomical counting style is the year 4194 BCE in historical counting style.

conjunction	-4193 May 04 j 16:33	9° Υ 13'05	-1°-50'-22	retrograde	-4185 Sep 04 j 19:18	29° Υ 37'36	
minimum elong	-4193 May 04 j 16:34	9° Υ 13'05	1°50'22	opposition	-4185 Nov 21 j 01:02	28° Υ 14'08	-1°-25'-12
max. Earth dist.	-4193 May 04 j 12:58	9° Υ 12'45	30.89730 AU	min. Earth dist.	-4185 Nov 21 j 11:41	28° Υ 13'23	28.96343 AU
retrograde	-4193 Aug 18 j 00:08	11° Υ 44'39		direct	-4184 Feb 08 j 07:22	26° Υ 48'45	
opposition	-4193 Nov 03 j 13:46	10° Υ 20'42	-1°-56'-23	max. Earth dist.	-4184 May 24 j 11:12	29° Υ 19'47	30.96698 AU
min. Earth dist.	-4193 Nov 03 j 16:17	10° Υ 20'32	28.90328 AU				
direct	-4192 Jan 21 j 02:32	8° Υ 55'39		conjunction	-4184 May 25 j 00:10	29° Υ 20'59	-1°-17'-35
				minimum elong	-4184 May 25 j 00:10	29° Υ 20'59	1°17'31
conjunction	-4192 May 06 j 06:56	11° Υ 27'40	-1°-47'-18		-4184 Jun 11 j 16:31	0° δ	
minimum elong	-4192 May 06 j 06:57	11° Υ 27'40	1°47'17	retrograde	-4184 Sep 06 j 06:35	1° δ 50'55	
max. Earth dist.	-4192 May 06 j 03:10	11° Υ 27'19	30.90704 AU	opposition	-4184 Nov 22 j 11:18	0° δ 27'30	-1°-20'-41
retrograde	-4192 Aug 19 j 10:51	13° Υ 59'07		min. Earth dist.	-4184 Nov 22 j 21:47	0° δ 26'45	28.97206 AU
opposition	-4192 Nov 05 j 00:19	12° Υ 35'16	-1°-53'-2		-4184 Dec 08 j 22:40	30° κ Υ	
min. Earth dist.	-4192 Nov 05 j 04:44	12° Υ 34'57	28.91282 AU	direct	-4183 Feb 09 j 18:56	29° Υ 02'05	
direct	-4191 Jan 22 j 13:53	11° Υ 10'13			-4183 Apr 11 j 23:27	0° δ	
conjunction	-4191 May 08 j 21:22	13° Υ 42'19	-1°-44'-5	conjunction	-4183 May 27 j 13:57	1° δ 34'20	-1°-13'-18
minimum elong	-4191 May 08 j 21:23	13° Υ 42'19	1°44'05	minimum elong	-4183 May 27 j 13:57	1° δ 34'21	1°13'15
max. Earth dist.	-4191 May 08 j 15:50	13° Υ 41'48	30.91638 AU	max. Earth dist.	-4183 May 27 j 01:18	1° δ 33'10	30.97620 AU
retrograde	-4191 Aug 21 j 23:54	16° Υ 13'36		retrograde	-4183 Sep 08 j 16:14	4° δ 04'06	
opposition	-4191 Nov 07 j 10:37	14° Υ 49'51	-1°-49'-30	opposition	-4183 Nov 24 j 21:37	2° δ 40'46	-1°-16'-3
min. Earth dist.	-4191 Nov 07 j 15:11	14° Υ 49'31	28.92166 AU	min. Earth dist.	-4183 Nov 25 j 09:36	2° δ 39'56	28.98185 AU
direct	-4190 Jan 25 j 03:14	13° Υ 24'46		direct	-4182 Feb 12 j 05:41	1° δ 15'21	
conjunction	-4190 May 11 j 11:54	15° Υ 56'56	-1°-40'-43	conjunction	-4182 May 30 j 03:37	3° δ 47'39	-1°-8'-54
minimum elong	-4190 May 11 j 11:54	15° Υ 56'56	1°40'41	minimum elong	-4182 May 30 j 03:37	3° δ 47'39	1°08'49
max. Earth dist.	-4190 May 11 j 05:08	15° Υ 56'18	30.92473 AU	max. Earth dist.	-4182 May 29 j 13:42	3° δ 46'21	30.98671 AU
retrograde	-4190 Aug 24 j 11:47	18° Υ 28'03		retrograde	-4182 Sep 11 j 04:04	6° δ 17'16	
opposition	-4190 Nov 09 j 21:13	17° Υ 04'22	-1°-45'-49	opposition	-4182 Nov 27 j 07:54	4° δ 54'02	-1°-11'-17
min. Earth dist.	-4190 Nov 10 j 03:48	17° Υ 03'53	28.92954 AU	min. Earth dist.	-4182 Nov 27 j 19:29	4° δ 53'13	28.99271 AU
direct	-4189 Jan 27 j 16:02	15° Υ 39'15		direct	-4181 Feb 14 j 18:47	3° δ 28'38	
conjunction	-4189 May 14 j 02:16	18° Υ 11'27	-1°-37'-12	conjunction	-4181 Jun 01 j 17:12	6° δ 00'59	-1°-4'-24
minimum elong	-4189 May 14 j 02:16	18° Υ 11'27	1°37'10	minimum elong	-4181 Jun 01 j 17:12	6° δ 00'59	1°04'20
max. Earth dist.	-4189 May 13 j 18:26	18° Υ 10'43	30.93224 AU	max. Earth dist.	-4181 Jun 01 j 02:51	5° δ 59'39	30.99790 AU
retrograde	-4189 Aug 26 j 23:59	20° Υ 42'22		retrograde	-4181 Sep 13 j 15:03	8° δ 30'29	
opposition	-4189 Nov 12 j 07:35	19° Υ 18'44	-1°-41'-59	opposition	-4181 Nov 29 j 18:21	7° δ 07'21	-1°-6'-25
min. Earth dist.	-4189 Nov 12 j 14:23	19° Υ 18'15	28.93649 AU	min. Earth dist.	-4181 Nov 30 j 07:35	7° δ 06'25	29.00413 AU
direct	-4188 Jan 30 j 06:30	17° Υ 53'35		direct	-4180 Feb 17 j 06:46	5° δ 41'59	
conjunction	-4188 May 15 j 16:29	20° Υ 25'48	-1°-33'-32	conjunction	-4180 Jun 03 j 06:46	8° δ 14'23	0°-59'-48
minimum elong	-4188 May 15 j 16:29	20° Υ 25'48	1°33'29	minimum elong	-4180 Jun 03 j 06:46	8° δ 14'23	0°59'42
max. Earth dist.	-4188 May 15 j 06:57	20° Υ 24'55	30.93894 AU	max. Earth dist.	-4180 Jun 02 j 15:41	8° δ 12'59	31.00946 AU
retrograde	-4188 Aug 28 j 11:28	22° Υ 56'31		retrograde	-4180 Sep 15 j 02:59	10° δ 43'45	
opposition	-4188 Nov 13 j 18:00	21° Υ 32'55	-1°-38'00	opposition	-4180 Dec 01 j 04:41	9° δ 20'45	-1°-1'-27
min. Earth dist.	-4188 Nov 14 j 02:24	21° Υ 32'20	28.94303 AU	min. Earth dist.	-4180 Dec 01 j 17:57	9° δ 19'48	29.01545 AU
direct	-4187 Jan 31 j 17:53	20° Υ 07'42		direct	-4179 Feb 18 j 20:35	7° δ 55'24	
conjunction	-4187 May 18 j 06:38	22° Υ 39'56	-1°-29'-44	conjunction	-4179 Jun 05 j 20:17	10° δ 27'51	0°-55'-7
minimum elong	-4187 May 18 j 06:39	22° Υ 39'56	1°29'41	minimum elong	-4179 Jun 05 j 20:17	10° δ 27'51	0°55'01
max. Earth dist.	-4187 May 17 j 21:00	22° Υ 39'02	30.94543 AU	max. Earth dist.	-4179 Jun 05 j 03:43	10° δ 26'19	31.02048 AU
retrograde	-4187 Aug 30 j 23:00	25° Υ 10'26		retrograde	-4179 Sep 17 j 14:46	12° δ 57'06	
opposition	-4187 Nov 16 j 04:21	23° Υ 46'53	-1°-33'-52	opposition	-4179 Dec 03 j 15:14	11° δ 34'11	0°-56'-24
min. Earth dist.	-4187 Nov 16 j 13:21	23° Υ 46'15	28.94932 AU	min. Earth dist.	-4179 Dec 04 j 06:02	11° δ 33'08	29.02611 AU
direct	-4186 Feb 03 j 07:38	22° Υ 21'36		direct	-4178 Feb 21 j 07:55	10° δ 08'51	
conjunction	-4186 May 20 j 20:37	24° Υ 53'50	-1°-25'-49	conjunction	-4178 Jun 08 j 09:54	12° δ 41'21	0°-50'-21
minimum elong	-4186 May 20 j 20:38	24° Υ 53'50	1°25'44	minimum elong	-4178 Jun 08 j 09:54	12° δ 41'21	0°50'14
max. Earth dist.	-4186 May 20 j 09:00	24° Υ 52'45	30.95189 AU	max. Earth dist.	-4178 Jun 07 j 17:06	12° δ 39'48	31.03061 AU
retrograde	-4186 Sep 02 j 10:16	27° Υ 24'08			-4178 Aug 26 j 10:09	15° δ	
opposition	-4186 Nov 18 j 14:35	26° Υ 00'37	-1°-29'-36	retrograde	-4178 Sep 20 j 02:27	15° δ 10'26	
min. Earth dist.	-4186 Nov 19 j 00:16	25° Υ 59'56	28.95603 AU		-4178 Oct 14 j 21:40	15° κ δ	
direct	-4185 Feb 05 j 18:49	24° Υ 35'16		opposition	-4178 Dec 06 j 01:44	13° δ 47'37	0°-51'-16
conjunction	-4185 May 23 j 10:38	27° Υ 07'30	-1°-21'-45	min. Earth dist.	-4178 Dec 06 j 17:16	13° δ 46'31	29.03554 AU
minimum elong	-4185 May 23 j 10:39	27° Υ 07'30	1°21'42	direct	-4177 Feb 23 j 22:06	12° δ 22'17	
max. Earth dist.	-4185 May 22 j 23:22	27° Υ 06'28	30.95893 AU	conjunction	-4177 Jun 10 j 23:18	14° δ 54'48	0°-45'-31

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Attention, astronomical year style is used: The year -4177 in astronomical counting style is the year 4178 BCE in historical counting style.

minimum elong	-4177 Jun 10 j 23:19	14°8'54"48	0°45'25	max. Earth dist.	-4170 Jun 25 j 18:44	0°II22'11	31.09219 AU
max. Earth dist.	-4177 Jun 10 j 04:27	14°8'53"03	31.03952 AU	retrograde	-4170 Oct 07 j 12:30	2°II52'07	
	-4177 Jun 13 j 07:16	15°8		opposition	-4170 Dec 23 j 13:47	1°II29'38	0°-8'-22
retrograde	-4177 Sep 22 j 13:51	17°8'23"45		min. Earth dist.	-4170 Dec 24 j 09:46	1°II28'14	29.09759 AU
opposition	-4177 Dec 08 j 12:19	16°8'00"59	0°-46'-4	direct	-4169 Mar 13 j 22:46	0°II04'07	
min. Earth dist.	-4177 Dec 09 j 04:34	15°8'59"50	29.04396 AU	max. Earth dist.	-4169 Jun 28 j 07:43	2°II34'26	31.10269 AU
	-4176 Jan 17 j 20:31	15°R8					
direct	-4176 Feb 26 j 09:45	14°8'35"38		conjunction	-4169 Jun 29 j 05:39	2°II36'28	0°-5'-18
	-4176 Apr 05 j 08:43	15°8		minimum elong	-4169 Jun 29 j 05:38	2°II36'28	0°05'09
				behind sun begin	-4169 Jun 28 j 23:17	2°II35'54	
conjunction	-4176 Jun 12 j 12:34	17°8'08"09	0°-40'-37	behind sun end	-4169 Jun 29 j 11:59	2°II37'02	
minimum elong	-4176 Jun 12 j 12:34	17°8'08"09	0°40'30	retrograde	-4169 Oct 09 j 23:47	5°II04'13	
max. Earth dist.	-4176 Jun 11 j 17:53	17°8'06"25	31.04739 AU	opposition	-4169 Dec 26 j 00:24	3°II41'48	0°-2'-53
retrograde	-4176 Sep 23 j 22:45	19°8'36"56		min. Earth dist.	-4169 Dec 26 j 20:30	3°II40'24	29.10836 AU
opposition	-4176 Dec 09 j 22:55	18°8'14"13	0°-40'-48	direct	-4168 Mar 15 j 13:06	2°II16'20	
min. Earth dist.	-4176 Dec 10 j 16:25	18°8'12"59	29.05125 AU				
direct	-4175 Feb 27 j 22:46	16°8'48"51		conjunction	-4168 Jun 30 j 17:44	4°II48'41	0°00'-5
max. Earth dist.	-4175 Jun 14 j 05:02	19°8'19"25	31.05440 AU	minimum elong	-4168 Jun 30 j 17:44	4°II48'40	0°00'05
				behind sun begin	-4168 Jun 30 j 11:34	4°II48'08	
conjunction	-4175 Jun 15 j 01:41	19°8'21"20	0°-35'-40	behind sun end	-4168 Jun 30 j 23:54	4°II49'13	
minimum elong	-4175 Jun 15 j 01:42	19°8'21"21	0°35'34	max. Earth dist.	-4168 Jun 29 j 18:34	4°II46'32	31.11373 AU
retrograde	-4175 Sep 26 j 09:41	21°8'49"57		asc. node	-4168 Jul 08 j 04:02	5°II05'15	
opposition	-4175 Dec 12 j 09:13	20°8'27"17	0°-35'-29	retrograde	-4168 Oct 11 j 10:59	7°II16'20	
min. Earth dist.	-4175 Dec 13 j 02:49	20°8'26"02	29.05797 AU	opposition	-4168 Dec 27 j 11:02	5°II54'00	0°02'35
direct	-4174 Mar 02 j 10:18	19°8'01"51		min. Earth dist.	-4168 Dec 28 j 07:21	5°II52'35	29.11953 AU
				direct	-4167 Mar 18 j 00:44	4°II28'33	
conjunction	-4174 Jun 17 j 14:51	21°8'34"20	0°-30'-41	max. Earth dist.	-4167 Jul 02 j 07:32	6°II58'49	31.12471 AU
minimum elong	-4174 Jun 17 j 14:51	21°8'34"20	0°30'33				
max. Earth dist.	-4174 Jun 16 j 18:26	21°8'32"26	31.06091 AU	conjunction	-4167 Jul 03 j 06:07	7°II00'54	0°05'06
retrograde	-4174 Sep 28 j 18:42	24°8'02"46		minimum elong	-4167 Jul 03 j 06:06	7°II00'54	0°05'16
opposition	-4174 Dec 14 j 19:49	22°8'40"07	0°-30'-8	behind sun begin	-4167 Jul 02 j 23:46	7°II00'21	
min. Earth dist.	-4174 Dec 15 j 14:59	22°8'38"47	29.06442 AU	behind sun end	-4167 Jul 03 j 12:26	7°II01'28	
direct	-4173 Mar 04 j 21:01	21°8'14"40		retrograde	-4167 Oct 13 j 20:22	9°II28'27	
max. Earth dist.	-4173 Jun 19 j 06:01	23°8'45"06	31.06752 AU	opposition	-4167 Dec 29 j 21:43	8°II06'13	0°08'04
				min. Earth dist.	-4167 Dec 30 j 19:07	8°II04'43	29.13021 AU
conjunction	-4173 Jun 20 j 03:32	23°8'47"05	0°-25'-39	direct	-4166 Mar 20 j 13:40	6°II40'48	
minimum elong	-4173 Jun 20 j 03:32	23°8'47"05	0°25'31				
retrograde	-4173 Oct 01 j 04:50	26°8'15"22		conjunction	-4166 Jul 05 j 18:16	9°II13'08	0°10'12
opposition	-4173 Dec 17 j 06:15	24°8'52"45	0°-24'-44	minimum elong	-4166 Jul 05 j 18:16	9°II13'08	0°10'23
min. Earth dist.	-4173 Dec 18 j 00:48	24°8'51"27	29.07123 AU	behind sun begin	-4166 Jul 05 j 13:09	9°II12'41	
direct	-4172 Mar 06 j 10:30	23°8'27"14		behind sun end	-4166 Jul 05 j 23:23	9°II13'36	
				max. Earth dist.	-4166 Jul 04 j 18:01	9°II10'53	31.13505 AU
conjunction	-4172 Jun 21 j 16:14	25°8'59"38	0°-20'-35	retrograde	-4166 Oct 16 j 07:52	11°II40'35	
minimum elong	-4172 Jun 21 j 16:14	25°8'59"38	0°20'27	opposition	-4165 Jan 01 j 08:31	10°II18'24	0°13'33
max. Earth dist.	-4172 Jun 20 j 18:43	25°8'57"39	31.07462 AU	min. Earth dist.	-4165 Jan 02 j 05:44	10°II16'56	29.14013 AU
retrograde	-4172 Oct 02 j 14:29	28°8'27"46		direct	-4165 Mar 23 j 01:35	8°II53'01	
opposition	-4172 Dec 18 j 16:44	27°8'05"10	0°-19'-18	max. Earth dist.	-4165 Jul 07 j 06:34	11°II23'07	31.14431 AU
min. Earth dist.	-4172 Dec 19 j 12:30	27°8'03"47	29.07890 AU				
direct	-4171 Mar 08 j 21:58	25°8'39"38		conjunction	-4165 Jul 08 j 06:24	11°II25'20	0°15'18
max. Earth dist.	-4171 Jun 23 j 06:58	28°8'09"59	31.08288 AU	minimum elong	-4165 Jul 08 j 06:23	11°II25'20	0°15'28
				behind sun begin	-4165 Jul 08 j 04:47	11°II25'11	
conjunction	-4171 Jun 24 j 04:47	28°8'12"00	0°-15'-30	behind sun end	-4165 Jul 08 j 07:59	11°II25'28	
minimum elong	-4171 Jun 24 j 04:46	28°8'12"00	0°15'22	retrograde	-4165 Oct 18 j 16:49	13°II52'41	
behind sun begin	-4171 Jun 24 j 03:06	28°8'11"52		opposition	-4164 Jan 03 j 19:32	12°II30'33	0°18'59
behind sun end	-4171 Jun 24 j 06:26	28°8'12"09		min. Earth dist.	-4164 Jan 04 j 18:14	12°II28'58	29.14887 AU
	-4171 Aug 17 j 02:01	0°II		direct	-4164 Mar 24 j 12:55	11°II05'10	
retrograde	-4171 Oct 05 j 01:15	0°II39'59					
	-4171 Nov 24 j 12:20	30°R8		conjunction	-4164 Jul 09 j 18:22	13°II37'26	0°20'23
opposition	-4171 Dec 21 j 03:13	29°8'17"26	0°-13'-51	minimum elong	-4164 Jul 09 j 18:22	13°II37'26	0°20'33
min. Earth dist.	-4171 Dec 21 j 22:25	29°8'16"06	29.08762 AU	max. Earth dist.	-4164 Jul 08 j 17:21	13°II35'06	31.15251 AU
direct	-4170 Mar 11 j 11:17	27°8'51"54		retrograde	-4164 Oct 20 j 02:46	16°II04'40	
	-4170 Jun 15 j 19:20	0°II		opposition	-4163 Jan 05 j 06:13	14°II42'35	0°24'24
conjunction	-4170 Jun 26 j 17:13	0°II24'16	0°-10'-24	min. Earth dist.	-4163 Jan 06 j 04:27	14°II41'02	29.15649 AU
minimum elong	-4170 Jun 26 j 17:14	0°II24'16	0°10'15	direct	-4163 Mar 27 j 01:46	13°II17'11	
behind sun begin	-4170 Jun 26 j 12:03	0°II23'48		max. Earth dist.	-4163 Jul 11 j 05:10	15°II47'04	31.15952 AU
behind sun end	-4170 Jun 26 j 22:24	0°II24'43					
				conjunction	-4163 Jul 12 j 06:23	15°II49'24	0°25'25

Attention, astronomical year style is used: The year -4163 in astronomical counting style is the year 4164 BCE in historical counting style.

minimum elong	-4163 Jul 12 j 06:22	15°II49'24	0°25'35	minimum elong	-4155 Jul 30 j 00:30	3°☾20'43	1°03'54
retrograde	-4163 Oct 22 j 12:14	18°II16'32		retrograde	-4155 Nov 08 j 22:15	5°☾47'18	
opposition	-4162 Jan 07 j 17:12	16°II54'28	0°29'46	opposition	-4154 Jan 25 j 09:17	4°☾25'33	1°10'24
min. Earth dist.	-4162 Jan 08 j 16:47	16°II52'50	29.16313 AU	min. Earth dist.	-4154 Jan 26 j 07:56	4°☾23'59	29.22613 AU
direct	-4162 Mar 29 j 12:45	15°II29'03		direct	-4154 Apr 16 j 15:58	3°☾00'22	
				max. Earth dist.	-4154 Jul 31 j 10:41	5°☾29'52	31.23007 AU
conjunction	-4162 Jul 14 j 18:06	18°II01'13	0°30'25				
minimum elong	-4162 Jul 14 j 18:06	18°II01'13	0°30'37	conjunction	-4154 Aug 01 j 11:25	5°☾32'11	1°08'09
max. Earth dist.	-4162 Jul 13 j 16:36	17°II58'50	31.16579 AU	minimum elong	-4154 Aug 01 j 11:24	5°☾32'11	1°08'21
retrograde	-4162 Oct 24 j 22:24	20°II28'14		retrograde	-4154 Nov 11 j 07:50	7°☾58'46	
opposition	-4161 Jan 10 j 04:05	19°II06'10	0°35'06	opposition	-4153 Jan 27 j 20:45	6°☾37'03	1°15'06
min. Earth dist.	-4161 Jan 11 j 03:12	19°II04'34	29.16906 AU	min. Earth dist.	-4153 Jan 28 j 20:24	6°☾35'25	29.23528 AU
direct	-4161 Apr 01 j 01:48	17°II40'45		direct	-4153 Apr 19 j 01:53	5°☾11'56	
max. Earth dist.	-4161 Jul 16 j 03:35	20°II10'25	31.17158 AU				
				conjunction	-4153 Aug 03 j 22:18	7°☾43'41	1°12'30
conjunction	-4161 Jul 17 j 05:41	20°II12'50	0°35'22	minimum elong	-4153 Aug 03 j 22:17	7°☾43'41	1°12'41
minimum elong	-4161 Jul 17 j 05:41	20°II12'50	0°35'33	max. Earth dist.	-4153 Aug 02 j 21:33	7°☾41'22	31.23868 AU
retrograde	-4161 Oct 27 j 09:17	22°II39'46		retrograde	-4153 Nov 13 j 18:04	10°☾10'15	
opposition	-4160 Jan 12 j 15:02	21°II17'42	0°40'22	opposition	-4152 Jan 30 j 08:09	8°☾48'34	1°19'41
min. Earth dist.	-4160 Jan 13 j 14:48	21°II16'04	29.17504 AU	min. Earth dist.	-4152 Jan 31 j 07:12	8°☾47'00	29.24329 AU
direct	-4160 Apr 02 j 13:25	19°II52'16		direct	-4152 Apr 20 j 14:01	7°☾23'30	
				max. Earth dist.	-4152 Aug 04 j 07:40	9°☾52'49	31.24593 AU
conjunction	-4160 Jul 18 j 17:02	22°II24'18	0°40'16				
minimum elong	-4160 Jul 18 j 17:02	22°II24'18	0°40'28	conjunction	-4152 Aug 05 j 09:02	9°☾55'11	1°16'44
max. Earth dist.	-4160 Jul 17 j 15:48	22°II21'57	31.17766 AU	minimum elong	-4152 Aug 05 j 09:02	9°☾55'11	1°16'55
retrograde	-4160 Oct 28 j 19:49	24°II51'07		retrograde	-4152 Nov 15 j 05:04	12°☾21'44	
opposition	-4159 Jan 14 j 01:59	23°II29'04	0°45'34	opposition	-4151 Jan 31 j 19:40	11°☾00'04	1°24'09
min. Earth dist.	-4159 Jan 15 j 01:37	23°II27'26	29.18132 AU	min. Earth dist.	-4151 Feb 01 j 19:21	10°☾58'27	29.24998 AU
direct	-4159 Apr 05 j 03:48	22°II03'38		direct	-4151 Apr 23 j 01:29	9°☾35'01	
max. Earth dist.	-4159 Jul 20 j 02:11	24°II33'10	31.18430 AU				
				conjunction	-4151 Aug 07 j 19:50	12°☾06'38	1°20'51
conjunction	-4159 Jul 21 j 04:16	24°II35'36	0°45'06	minimum elong	-4151 Aug 07 j 19:50	12°☾06'38	1°21'02
minimum elong	-4159 Jul 21 j 04:16	24°II35'36	0°45'17	max. Earth dist.	-4151 Aug 06 j 19:10	12°☾04'19	31.25182 AU
retrograde	-4159 Oct 31 j 06:40	27°II02'21		retrograde	-4151 Nov 17 j 15:22	14°☾33'08	
opposition	-4158 Jan 16 j 12:50	25°II40'19	0°50'41	opposition	-4150 Feb 03 j 07:12	13°☾11'28	1°28'29
min. Earth dist.	-4158 Jan 17 j 12:05	25°II38'43	29.18860 AU	min. Earth dist.	-4150 Feb 04 j 06:55	13°☾09'50	29.25512 AU
direct	-4158 Apr 07 j 15:18	24°II14'54		direct	-4150 Apr 25 j 15:07	11°☾46'26	
				max. Earth dist.	-4150 Aug 09 j 04:48	14°☾15'33	31.25634 AU
conjunction	-4158 Jul 23 j 15:34	26°II46'50	0°49'52				
minimum elong	-4158 Jul 23 j 15:33	26°II46'50	0°50'04	conjunction	-4150 Aug 10 j 06:26	14°☾17'56	1°24'51
max. Earth dist.	-4158 Jul 22 j 14:47	26°II44'31	31.19206 AU	minimum elong	-4150 Aug 10 j 06:26	14°☾17'56	1°25'03
retrograde	-4158 Nov 02 j 15:57	29°II13'31		retrograde	-4150 Nov 20 j 02:33	16°☾44'24	
opposition	-4157 Jan 19 j 00:00	27°II51'32	0°55'45	opposition	-4149 Feb 05 j 18:48	15°☾22'42	1°32'42
min. Earth dist.	-4157 Jan 19 j 23:33	27°II49'55	29.19692 AU	min. Earth dist.	-4149 Feb 06 j 18:12	15°☾21'06	29.25923 AU
direct	-4157 Apr 10 j 04:30	26°II26'10		direct	-4149 Apr 28 j 02:22	13°☾57'40	
max. Earth dist.	-4157 Jul 25 j 00:52	28°II55'40	31.20098 AU				
				conjunction	-4149 Aug 12 j 16:53	16°☾29'04	1°28'44
conjunction	-4157 Jul 26 j 02:27	28°II58'03	0°54'34	minimum elong	-4149 Aug 12 j 16:52	16°☾29'04	1°28'54
minimum elong	-4157 Jul 26 j 02:26	28°II58'03	0°54'44	max. Earth dist.	-4149 Aug 11 j 16:30	16°☾26'48	31.25989 AU
	-4157 Aug 23 j 13:34	0°☾		retrograde	-4149 Nov 22 j 12:08	18°☾55'29	
retrograde	-4157 Nov 05 j 03:32	1°☾24'42		opposition	-4148 Feb 08 j 06:29	17°☾33'45	1°36'46
opposition	-4156 Jan 21 j 11:01	0°☾02'47	1°00'43	min. Earth dist.	-4148 Feb 09 j 06:19	17°☾32'08	29.26244 AU
min. Earth dist.	-4156 Jan 22 j 09:34	0°☾01'14	29.20636 AU	direct	-4148 Apr 29 j 16:27	16°☾08'43	
	-4156 Jan 23 j 03:22	30°☾II		max. Earth dist.	-4148 Aug 13 j 02:00	18°☾37'39	31.26292 AU
direct	-4156 Apr 11 j 16:33	28°II37'28					
	-4156 Jun 25 j 10:10	0°☾		conjunction	-4148 Aug 14 j 03:08	18°☾40'00	1°32'29
				minimum elong	-4148 Aug 14 j 03:07	18°☾40'00	1°32'40
conjunction	-4156 Jul 27 j 13:33	1°☾09'20	0°59'11	retrograde	-4148 Nov 23 j 23:40	21°☾06'22	
minimum elong	-4156 Jul 27 j 13:32	1°☾09'20	0°59'23	opposition	-4147 Feb 09 j 17:52	19°☾44'36	1°40'42
max. Earth dist.	-4156 Jul 26 j 13:04	1°☾07'03	31.21067 AU	min. Earth dist.	-4147 Feb 10 j 16:38	19°☾43'02	29.26550 AU
retrograde	-4156 Nov 06 j 12:34	3°☾35'57		direct	-4147 May 02 j 05:24	18°☾19'33	
opposition	-4155 Jan 22 j 22:06	2°☾14'07	1°05'37				
min. Earth dist.	-4155 Jan 23 j 21:42	2°☾12'29	29.21629 AU	conjunction	-4147 Aug 16 j 13:26	20°☾50'44	1°36'05
direct	-4155 Apr 14 j 03:49	0°☾48'53		minimum elong	-4147 Aug 16 j 13:25	20°☾50'44	1°36'15
max. Earth dist.	-4155 Jul 28 j 23:28	3°☾18'22	31.22066 AU	max. Earth dist.	-4147 Aug 15 j 13:36	20°☾48'30	31.26594 AU
				retrograde	-4147 Nov 26 j 08:26	23°☾17'04	
conjunction	-4155 Jul 30 j 00:30	3°☾20'43	1°03'43	opposition	-4146 Feb 12 j 05:39	21°☾55'16	1°44'29

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Attention, astronomical year style is used: The year -4146 in astronomical counting style is the year 4147 BCE in historical counting style.

min. Earth dist.	-4146 Feb 13 j 04:58	21° \mathfrak{E} 53'41	29.26884 AU	min. Earth dist.	-4138 Mar 03 j 00:06	9° \mathfrak{Q} 20'17	29.30344 AU
direct	-4146 May 04 j 17:39	20° \mathfrak{E} 30'14		direct	-4138 May 22 j 15:24	7° \mathfrak{Q} 57'03	
				max. Earth dist.	-4138 Sep 04 j 10:33	10° \mathfrak{Q} 25'45	31.30205 AU
conjunction	-4146 Aug 18 j 23:23	23° \mathfrak{E} 01'19	1°39'34				
minimum elong	-4146 Aug 18 j 23:22	23° \mathfrak{E} 01'19	1°39'44	conjunction	-4138 Sep 05 j 06:12	10° \mathfrak{Q} 27'35	2°01'48
max. Earth dist.	-4146 Aug 17 j 23:42	22° \mathfrak{E} 59'05	31.26963 AU	minimum elong	-4138 Sep 05 j 06:12	10° \mathfrak{Q} 27'35	2°01'57
retrograde	-4146 Nov 28 j 17:58	25° \mathfrak{E} 27'38		retrograde	-4138 Dec 16 j 07:22	12° \mathfrak{Q} 54'21	
opposition	-4145 Feb 14 j 17:21	24° \mathfrak{E} 05'50	1°48'07	opposition	-4137 Mar 04 j 17:31	11° \mathfrak{Q} 32'35	2°11'12
min. Earth dist.	-4145 Feb 15 j 14:59	24° \mathfrak{E} 04'21	29.27297 AU	min. Earth dist.	-4137 Mar 05 j 13:12	11° \mathfrak{Q} 31'15	29.30349 AU
direct	-4145 May 07 j 06:08	22° \mathfrak{E} 40'50		direct	-4137 May 25 j 03:40	10° \mathfrak{Q} 08'05	
max. Earth dist.	-4145 Aug 20 j 10:35	25° \mathfrak{E} 09'41	31.27413 AU				
				conjunction	-4137 Sep 07 j 15:47	12° \mathfrak{Q} 38'30	2°03'49
conjunction	-4145 Aug 21 j 09:26	25° \mathfrak{E} 11'50	1°42'53	minimum elong	-4137 Sep 07 j 15:47	12° \mathfrak{Q} 38'30	2°03'58
minimum elong	-4145 Aug 21 j 09:25	25° \mathfrak{E} 11'50	1°43'03	max. Earth dist.	-4137 Sep 06 j 20:11	12° \mathfrak{Q} 36'40	31.30152 AU
retrograde	-4145 Dec 01 j 03:33	27° \mathfrak{E} 38'10			-4137 Dec 01 j 01:22	15° \mathfrak{Q}	
opposition	-4144 Feb 17 j 05:05	26° \mathfrak{E} 16'22	1°51'36	retrograde	-4137 Dec 18 j 17:02	15° \mathfrak{Q} 05'17	
min. Earth dist.	-4144 Feb 18 j 03:01	26° \mathfrak{E} 14'53	29.27806 AU		-4136 Jan 05 j 14:02	15° \mathfrak{R} \mathfrak{Q}	
direct	-4144 May 08 j 16:14	24° \mathfrak{E} 51'26		opposition	-4136 Mar 06 j 05:35	13° \mathfrak{Q} 43'28	2°13'16
				min. Earth dist.	-4136 Mar 06 j 23:49	13° \mathfrak{Q} 42'14	29.30242 AU
conjunction	-4144 Aug 22 j 19:20	27° \mathfrak{E} 22'22	1°46'04	direct	-4136 May 26 j 16:44	12° \mathfrak{Q} 18'59	
minimum elong	-4144 Aug 22 j 19:20	27° \mathfrak{E} 22'22	1°46'15	max. Earth dist.	-4136 Sep 08 j 06:17	14° \mathfrak{Q} 47'30	31.29998 AU
max. Earth dist.	-4144 Aug 21 j 21:16	27° \mathfrak{E} 20'17	31.27958 AU				
retrograde	-4144 Dec 02 j 13:27	29° \mathfrak{E} 48'45		conjunction	-4136 Sep 09 j 01:17	14° \mathfrak{Q} 49'17	2°05'40
opposition	-4143 Feb 18 j 16:50	28° \mathfrak{E} 26'59	1°54'55	minimum elong	-4136 Sep 09 j 01:17	14° \mathfrak{Q} 49'17	2°05'49
min. Earth dist.	-4143 Feb 19 j 13:32	28° \mathfrak{E} 25'34	29.28364 AU		-4136 Sep 13 j 19:12	15° \mathfrak{Q}	
direct	-4143 May 11 j 04:15	27° \mathfrak{E} 02'07		retrograde	-4136 Dec 20 j 02:50	17° \mathfrak{Q} 16'06	
max. Earth dist.	-4143 Aug 24 j 07:04	29° \mathfrak{E} 30'55	31.28522 AU	opposition	-4135 Mar 08 j 17:55	15° \mathfrak{Q} 54'13	2°15'10
				min. Earth dist.	-4135 Mar 09 j 12:29	15° \mathfrak{Q} 52'57	29.30071 AU
conjunction	-4143 Aug 25 j 05:10	29° \mathfrak{E} 32'59	1°49'06		-4135 Apr 13 j 22:48	15° \mathfrak{R} \mathfrak{Q}	
minimum elong	-4143 Aug 25 j 05:10	29° \mathfrak{E} 32'59	1°49'15	direct	-4135 May 29 j 03:59	14° \mathfrak{Q} 29'44	
	-4143 Sep 06 j 06:19	0° \mathfrak{Q}			-4135 Jul 11 j 19:11	15° \mathfrak{Q}	
retrograde	-4143 Dec 05 j 00:34	1° \mathfrak{Q} 59'26					
opposition	-4142 Feb 21 j 04:44	0° \mathfrak{Q} 37'42	1°58'04	conjunction	-4135 Sep 11 j 10:36	16° \mathfrak{Q} 59'54	2°07'21
min. Earth dist.	-4142 Feb 22 j 01:28	0° \mathfrak{Q} 36'17	29.28940 AU	minimum elong	-4135 Sep 11 j 10:36	16° \mathfrak{Q} 59'54	2°07'29
	-4142 Mar 17 j 02:50	30° \mathfrak{R} \mathfrak{E}		max. Earth dist.	-4135 Sep 10 j 16:41	16° \mathfrak{Q} 58'13	31.29816 AU
direct	-4142 May 13 j 14:32	29° \mathfrak{E} 12'55		retrograde	-4135 Dec 22 j 12:02	19° \mathfrak{Q} 26'45	
	-4142 Jul 07 j 18:07	0° \mathfrak{Q}		opposition	-4134 Mar 11 j 06:11	18° \mathfrak{Q} 04'48	2°16'51
conjunction	-4142 Aug 27 j 15:07	1° \mathfrak{Q} 43'44	1°51'58	min. Earth dist.	-4134 Mar 11 j 23:11	18° \mathfrak{Q} 03'39	29.29891 AU
minimum elong	-4142 Aug 27 j 15:06	1° \mathfrak{Q} 43'44	1°52'08	direct	-4134 May 31 j 16:49	16° \mathfrak{Q} 40'20	
max. Earth dist.	-4142 Aug 26 j 18:22	1° \mathfrak{Q} 41'48	31.29076 AU				
retrograde	-4142 Dec 07 j 11:07	4° \mathfrak{Q} 10'15		conjunction	-4134 Sep 13 j 19:49	19° \mathfrak{Q} 10'22	2°08'50
opposition	-4141 Feb 23 j 16:48	2° \mathfrak{Q} 48'32	2°01'03	minimum elong	-4134 Sep 13 j 19:49	19° \mathfrak{Q} 10'22	2°08'58
min. Earth dist.	-4141 Feb 24 j 13:08	2° \mathfrak{Q} 47'10	29.29462 AU	max. Earth dist.	-4134 Sep 13 j 02:09	19° \mathfrak{Q} 08'42	31.29658 AU
direct	-4141 May 16 j 02:45	1° \mathfrak{Q} 23'51		retrograde	-4134 Dec 24 j 22:24	21° \mathfrak{Q} 37'16	
max. Earth dist.	-4141 Aug 29 j 03:27	3° \mathfrak{Q} 52'36	31.29555 AU	opposition	-4133 Mar 13 j 18:35	20° \mathfrak{Q} 15'15	2°18'21
				min. Earth dist.	-4133 Mar 14 j 11:02	20° \mathfrak{Q} 14'08	29.29786 AU
conjunction	-4141 Aug 30 j 00:46	3° \mathfrak{Q} 54'37	1°54'40	direct	-4133 Jun 03 j 02:55	18° \mathfrak{Q} 50'48	
minimum elong	-4141 Aug 30 j 00:46	3° \mathfrak{Q} 54'37	1°54'49				
retrograde	-4141 Dec 09 j 22:58	6° \mathfrak{Q} 21'12		conjunction	-4133 Sep 16 j 05:00	21° \mathfrak{Q} 20'43	2°10'09
opposition	-4140 Feb 26 j 04:51	4° \mathfrak{Q} 59'30	2°03'51	minimum elong	-4133 Sep 16 j 05:00	21° \mathfrak{Q} 20'43	2°10'16
min. Earth dist.	-4140 Feb 27 j 00:35	4° \mathfrak{Q} 58'10	29.29900 AU	max. Earth dist.	-4133 Sep 15 j 13:18	21° \mathfrak{Q} 19'14	31.29593 AU
direct	-4140 May 17 j 12:59	3° \mathfrak{Q} 34'53		retrograde	-4133 Dec 27 j 08:00	23° \mathfrak{Q} 47'42	
				opposition	-4132 Mar 15 j 06:55	22° \mathfrak{Q} 25'38	2°19'39
conjunction	-4140 Aug 31 j 10:43	6° \mathfrak{Q} 05'35	1°57'13	min. Earth dist.	-4132 Mar 15 j 22:21	22° \mathfrak{Q} 24'35	29.29758 AU
minimum elong	-4140 Aug 31 j 10:43	6° \mathfrak{Q} 05'35	1°57'22	direct	-4132 Jun 04 j 14:21	21° \mathfrak{Q} 01'14	
max. Earth dist.	-4140 Aug 30 j 14:42	6° \mathfrak{Q} 03'42	31.29916 AU				
retrograde	-4140 Dec 11 j 09:21	8° \mathfrak{Q} 32'14		conjunction	-4132 Sep 17 j 14:06	23° \mathfrak{Q} 31'03	2°11'16
opposition	-4139 Feb 27 j 16:56	7° \mathfrak{Q} 10'32	2°06'29	minimum elong	-4132 Sep 17 j 14:06	23° \mathfrak{Q} 31'03	2°11'23
min. Earth dist.	-4139 Feb 28 j 13:04	7° \mathfrak{Q} 09'10	29.30193 AU	max. Earth dist.	-4132 Sep 16 j 22:19	23° \mathfrak{Q} 29'33	31.29614 AU
direct	-4139 May 20 j 02:34	5° \mathfrak{Q} 45'58		retrograde	-4132 Dec 28 j 19:50	25° \mathfrak{Q} 58'07	
				opposition	-4131 Mar 17 j 19:08	24° \mathfrak{Q} 36'01	2°20'45
conjunction	-4139 Sep 02 j 20:28	8° \mathfrak{Q} 16'36	1°59'35	min. Earth dist.	-4131 Mar 18 j 09:18	24° \mathfrak{Q} 35'03	29.29826 AU
minimum elong	-4139 Sep 02 j 20:28	8° \mathfrak{Q} 16'36	1°59'44	direct	-4131 Jun 07 j 00:13	23° \mathfrak{Q} 11'41	
max. Earth dist.	-4139 Sep 01 j 23:42	8° \mathfrak{Q} 14'39	31.30138 AU				
retrograde	-4139 Dec 13 j 21:58	10° \mathfrak{Q} 43'18		conjunction	-4131 Sep 19 j 23:20	25° \mathfrak{Q} 41'25	2°12'12
opposition	-4138 Mar 02 j 05:07	9° \mathfrak{Q} 21'34	2°08'56	minimum elong	-4131 Sep 19 j 23:20	25° \mathfrak{Q} 41'25	2°12'18
				max. Earth dist.	-4131 Sep 19 j 09:32	25° \mathfrak{Q} 40'06	31.29709 AU

Attention, astronomical year style is used: The year -4130 in astronomical counting style is the year 4131 BCE in historical counting style.

retrograde	-4131 Dec 31 j 06:32	28° Ω 08'35		minimum elong	-4123 Oct 07 j 00:12	13° \mp 06'37	2°12'51
opposition	-4130 Mar 20 j 07:42	26° Ω 46'28	2°21'38	max. Earth dist.	-4123 Oct 06 j 15:10	13° \mp 05'46	31.28360 AU
min. Earth dist.	-4130 Mar 20 j 21:35	26° Ω 45'31	29.29938 AU	retrograde	-4122 Jan 17 j 22:03	15° \mp 34'41	
direct	-4130 Jun 09 j 12:48	25° Ω 22'13		opposition	-4122 Apr 07 j 13:21	14° \mp 12'10	2°21'28
				min. Earth dist.	-4122 Apr 07 j 20:57	14° \mp 11'39	29.28257 AU
				direct	-4122 Jun 27 j 09:02	12° \mp 48'19	
conjunction	-4130 Sep 22 j 08:17	27° Ω 51'51	2°12'56				
minimum elong	-4130 Sep 22 j 08:17	27° Ω 51'51	2°13'03				
max. Earth dist.	-4130 Sep 21 j 18:29	27° Ω 50'33	31.29839 AU	conjunction	-4122 Oct 09 j 09:06	15° \mp 17'09	2°12'01
	-4130 Nov 29 j 22:17	0° \mp		minimum elong	-4122 Oct 09 j 09:06	15° \mp 17'09	2°12'04
retrograde	-4129 Jan 02 j 19:25	0° \mp 19'09		max. Earth dist.	-4122 Oct 09 j 02:07	15° \mp 16'30	31.27835 AU
	-4129 Feb 06 j 14:23	30° \mathcal{R} Ω		retrograde	-4121 Jan 20 j 08:45	17° \mp 45'21	
opposition	-4129 Mar 22 j 20:13	28° Ω 57'00	2°22'20	opposition	-4121 Apr 10 j 02:15	16° \mp 22'44	2°20'33
min. Earth dist.	-4129 Mar 23 j 08:24	28° Ω 56'11	29.30064 AU	min. Earth dist.	-4121 Apr 10 j 09:19	16° \mp 22'16	29.27753 AU
direct	-4129 Jun 12 j 00:19	27° Ω 32'50		direct	-4121 Jun 29 j 21:13	14° \mp 58'56	
	-4129 Sep 23 j 16:02	0° \mp					
conjunction	-4129 Sep 24 j 17:30	0° \mp 02'24	2°13'29	conjunction	-4121 Oct 11 j 17:58	17° \mp 27'40	2°11'03
minimum elong	-4129 Sep 24 j 17:30	0° \mp 02'24	2°13'35	minimum elong	-4121 Oct 11 j 17:58	17° \mp 27'40	2°11'05
max. Earth dist.	-4129 Sep 24 j 05:07	0° \mp 01'14	31.29939 AU	max. Earth dist.	-4121 Oct 11 j 11:18	17° \mp 27'02	31.27376 AU
retrograde	-4128 Jan 05 j 05:39	2° \mp 29'49		retrograde	-4120 Jan 22 j 21:43	19° \mp 55'58	
opposition	-4128 Mar 24 j 08:47	1° \mp 07'39	2°22'49	opposition	-4120 Apr 11 j 14:49	18° \mp 33'18	2°19'25
min. Earth dist.	-4128 Mar 24 j 21:24	1° \mp 06'48	29.30141 AU	min. Earth dist.	-4120 Apr 11 j 19:51	18° \mp 32'58	29.27335 AU
	-4128 May 11 j 19:48	30° \mathcal{R} Ω		direct	-4120 Jul 01 j 07:56	17° \mp 09'32	
direct	-4128 Jun 13 j 11:41	29° Ω 43'33					
	-4128 Jul 15 j 09:08	0° \mp		conjunction	-4120 Oct 13 j 02:56	19° \mp 38'12	2°09'54
				minimum elong	-4120 Oct 13 j 02:56	19° \mp 38'12	2°09'57
conjunction	-4128 Sep 26 j 02:40	2° \mp 13'03	2°13'51	max. Earth dist.	-4120 Oct 12 j 21:52	19° \mp 37'43	31.26999 AU
minimum elong	-4128 Sep 26 j 02:40	2° \mp 13'03	2°13'57	retrograde	-4119 Jan 24 j 08:21	22° \mp 06'39	
max. Earth dist.	-4128 Sep 25 j 14:41	2° \mp 11'55	31.29980 AU	opposition	-4119 Apr 14 j 03:43	20° \mp 43'56	2°18'05
retrograde	-4127 Jan 06 j 16:42	4° \mp 40'34		min. Earth dist.	-4119 Apr 14 j 08:38	20° \mp 43'36	29.27003 AU
opposition	-4127 Mar 26 j 21:24	3° \mp 18'23	2°23'06	direct	-4119 Jul 03 j 18:48	19° \mp 20'15	
min. Earth dist.	-4127 Mar 27 j 08:22	3° \mp 17'38	29.30123 AU				
direct	-4127 Jun 16 j 00:46	1° \mp 54'21		conjunction	-4119 Oct 15 j 11:43	21° \mp 48'49	2°08'33
				minimum elong	-4119 Oct 15 j 11:43	21° \mp 48'49	2°08'35
conjunction	-4127 Sep 28 j 11:48	4° \mp 23'46	2°14'01	max. Earth dist.	-4119 Oct 15 j 07:46	21° \mp 48'26	31.26719 AU
minimum elong	-4127 Sep 28 j 11:48	4° \mp 23'46	2°14'06	retrograde	-4118 Jan 26 j 20:09	24° \mp 17'25	
max. Earth dist.	-4127 Sep 28 j 00:19	4° \mp 22'41	31.29894 AU	opposition	-4118 Apr 16 j 16:35	22° \mp 54'40	2°16'33
retrograde	-4126 Jan 09 j 03:43	6° \mp 51'24		min. Earth dist.	-4118 Apr 16 j 19:17	22° \mp 54'29	29.26745 AU
opposition	-4126 Mar 29 j 10:16	5° \mp 29'11	2°23'11	direct	-4118 Jul 06 j 07:54	21° \mp 31'04	
min. Earth dist.	-4126 Mar 29 j 21:31	5° \mp 28'25	29.29982 AU				
direct	-4126 Jun 18 j 12:11	4° \mp 05'13		conjunction	-4118 Oct 17 j 20:38	23° \mp 59'35	2°07'01
				minimum elong	-4118 Oct 17 j 20:39	23° \mp 59'35	2°07'04
conjunction	-4126 Sep 30 j 21:03	6° \mp 34'32	2°14'00	max. Earth dist.	-4118 Oct 17 j 17:30	23° \mp 59'17	31.26487 AU
minimum elong	-4126 Sep 30 j 21:03	6° \mp 34'32	2°14'05	retrograde	-4117 Jan 29 j 08:28	26° \mp 28'20	
max. Earth dist.	-4126 Sep 30 j 10:36	6° \mp 33'32	31.29690 AU	opposition	-4117 Apr 19 j 05:34	25° \mp 05'34	2°14'48
retrograde	-4125 Jan 11 j 13:35	9° \mp 02'16		min. Earth dist.	-4117 Apr 19 j 08:10	25° \mp 05'23	29.26531 AU
opposition	-4125 Mar 31 j 23:02	7° \mp 40'00	2°23'03	direct	-4117 Jul 08 j 19:04	23° \mp 42'04	
min. Earth dist.	-4125 Apr 01 j 08:54	7° \mp 39'20	29.29700 AU				
direct	-4125 Jun 21 j 01:00	6° \mp 16'05		conjunction	-4117 Oct 20 j 05:37	26° \mp 10'30	2°05'18
				minimum elong	-4117 Oct 20 j 05:37	26° \mp 10'30	2°05'19
conjunction	-4125 Oct 03 j 06:06	8° \mp 45'17	2°13'47	max. Earth dist.	-4117 Oct 20 j 04:01	26° \mp 10'21	31.26278 AU
minimum elong	-4125 Oct 03 j 06:06	8° \mp 45'17	2°13'51	retrograde	-4116 Jan 31 j 18:34	28° \mp 39'26	
max. Earth dist.	-4125 Oct 02 j 19:28	8° \mp 44'17	31.29343 AU	opposition	-4116 Apr 20 j 18:29	27° \mp 16'38	2°12'53
retrograde	-4124 Jan 14 j 00:25	11° \mp 13'09		min. Earth dist.	-4116 Apr 20 j 19:27	27° \mp 16'34	29.26292 AU
opposition	-4124 Apr 02 j 11:51	9° \mp 50'48	2°22'44	direct	-4116 Jul 10 j 07:30	25° \mp 53'13	
min. Earth dist.	-4124 Apr 02 j 21:30	9° \mp 50'09	29.29296 AU				
direct	-4124 Jun 22 j 11:15	8° \mp 26'55		conjunction	-4116 Oct 21 j 14:34	28° \mp 21'36	2°03'24
				minimum elong	-4116 Oct 21 j 14:34	28° \mp 21'36	2°03'25
conjunction	-4124 Oct 04 j 15:16	10° \mp 55'59	2°13'23	max. Earth dist.	-4116 Oct 21 j 12:55	28° \mp 21'26	31.26015 AU
minimum elong	-4124 Oct 04 j 15:16	10° \mp 55'59	2°13'27		-4116 Dec 07 j 21:20	0° $\underline{\Omega}$	
max. Earth dist.	-4124 Oct 04 j 06:21	10° \mp 55'09	31.28885 AU	retrograde	-4115 Feb 02 j 05:44	0° $\underline{\Omega}$ 50'42	
retrograde	-4123 Jan 15 j 09:58	13° \mp 23'57			-4115 Apr 02 j 21:26	30° \mathcal{R} \mp	
opposition	-4123 Apr 05 j 00:33	12° \mp 01'31	2°22'12	opposition	-4115 Apr 23 j 07:31	29° \mp 27'52	2°10'45
min. Earth dist.	-4123 Apr 05 j 09:26	12° \mp 00'55	29.28785 AU	min. Earth dist.	-4115 Apr 23 j 08:09	29° \mp 27'49	29.25995 AU
direct	-4123 Jun 24 j 22:56	10° \mp 37'40		direct	-4115 Jul 12 j 17:48	28° \mp 04'32	
					-4115 Oct 09 j 10:17	0° $\underline{\Omega}$	
conjunction	-4123 Oct 07 j 00:12	13° \mp 06'37	2°12'48	conjunction	-4115 Oct 23 j 23:47	0° $\underline{\Omega}$ 32'50	2°01'20

Attention, astronomical year style is used: The year -4115 in astronomical counting style is the year 4116 BCE in historical counting style.

minimum elong	-4115 Oct 23 j 23:47	0° 32 '50	2°01'20	opposition	-4106 May 14 j 05:20	19° 09 '02	1°43'38
max. Earth dist.	-4115 Oct 23 j 23:57	0° 32 '51	31.25670 AU	min. Earth dist.	-4106 May 13 j 21:47	19° 09 '32	29.19306 AU
retrograde	-4114 Feb 04 j 15:53	3° 02 '05		direct	-4106 Aug 02 j 00:13	17° 45 '56	
opposition	-4114 Apr 25 j 20:42	1° 39 '13	2°08'26				
min. Earth dist.	-4114 Apr 25 j 20:33	1° 39 '14	29.25580 AU	conjunction	-4106 Nov 12 j 10:21	20° 13 '26	1°35'14
direct	-4114 Jul 15 j 05:37	0° 15 '57		minimum elong	-4106 Nov 12 j 10:22	20° 13 '26	1°35'11
				max. Earth dist.	-4106 Nov 12 j 18:45	20° 14 '14	31.18894 AU
conjunction	-4114 Oct 26 j 08:50	2° 44 '09	1°59'04	retrograde	-4105 Feb 25 j 01:14	22° 43 '58	
minimum elong	-4114 Oct 26 j 08:50	2° 44 '10	1°59'04	opposition	-4105 May 16 j 18:22	21° 20 '20	1°39'47
max. Earth dist.	-4114 Oct 26 j 08:41	2° 44 '09	31.25199 AU	min. Earth dist.	-4105 May 16 j 09:43	21° 20 '55	29.18663 AU
retrograde	-4113 Feb 07 j 04:39	5° 13 '35		direct	-4105 Aug 04 j 12:03	19° 57 '18	
opposition	-4113 Apr 28 j 09:52	3° 50 '38	2°05'56				
min. Earth dist.	-4113 Apr 28 j 08:44	3° 50 '43	29.25037 AU	conjunction	-4105 Nov 14 j 19:37	22° 24 '46	1°31'34
direct	-4113 Jul 17 j 15:56	2° 27 '24		minimum elong	-4105 Nov 14 j 19:37	22° 24 '46	1°31'30
				max. Earth dist.	-4105 Nov 15 j 03:59	22° 25 '34	31.18282 AU
conjunction	-4113 Oct 28 j 18:12	4° 55 '31	1°56'39	retrograde	-4104 Feb 27 j 14:07	24° 55 '29	
minimum elong	-4113 Oct 28 j 18:12	4° 55 '31	1°56'38	opposition	-4104 May 18 j 07:15	23° 31 '49	1°35'48
max. Earth dist.	-4113 Oct 28 j 19:31	4° 55 '39	31.24576 AU	min. Earth dist.	-4104 May 17 j 21:28	23° 32 '29	29.18058 AU
retrograde	-4112 Feb 09 j 15:13	7° 25 '05		direct	-4104 Aug 05 j 21:50	22° 08 '52	
opposition	-4112 Apr 29 j 22:56	6° 02 '03	2°03'15				
min. Earth dist.	-4112 Apr 29 j 21:46	6° 02 '08	29.24331 AU	conjunction	-4104 Nov 16 j 05:06	24° 36 '19	1°27'46
direct	-4112 Jul 19 j 03:25	4° 38 '50		minimum elong	-4104 Nov 16 j 05:07	24° 36 '19	1°27'43
				max. Earth dist.	-4104 Nov 16 j 15:11	24° 37 '16	31.17670 AU
conjunction	-4112 Oct 30 j 03:24	7° 06 '51	1°54'03	retrograde	-4103 Mar 01 j 01:04	27° 07 '14	
minimum elong	-4112 Oct 30 j 03:25	7° 06 '51	1°54'03	opposition	-4103 May 20 j 20:26	25° 43 '32	1°31'40
max. Earth dist.	-4112 Oct 30 j 04:41	7° 06 '59	31.23816 AU	min. Earth dist.	-4103 May 20 j 10:25	25° 44 '13	29.17423 AU
retrograde	-4111 Feb 11 j 04:09	9° 36 '32		direct	-4103 Aug 08 j 08:35	24° 20 '40	
opposition	-4111 May 02 j 12:01	8° 13 '24	2°00'24				
min. Earth dist.	-4111 May 02 j 09:14	8° 13 '35	29.23501 AU	conjunction	-4103 Nov 18 j 14:29	26° 48 '04	1°23'51
direct	-4111 Jul 21 j 13:56	6° 50 '11		minimum elong	-4103 Nov 18 j 14:30	26° 48 '05	1°23'46
				max. Earth dist.	-4103 Nov 19 j 00:48	26° 49 '03	31.17024 AU
conjunction	-4111 Nov 01 j 12:31	9° 18 '06	1°51'18	retrograde	-4102 Mar 03 j 14:35	29° 19 '11	
minimum elong	-4111 Nov 01 j 12:32	9° 18 '06	1°51'17	opposition	-4102 May 23 j 09:34	27° 55 '27	1°27'24
max. Earth dist.	-4111 Nov 01 j 15:00	9° 18 '20	31.22937 AU	min. Earth dist.	-4102 May 22 j 21:58	27° 56 '14	29.16733 AU
retrograde	-4110 Feb 13 j 15:19	11° 47 '54		direct	-4102 Aug 10 j 18:12	26° 32 '38	
opposition	-4110 May 05 j 01:18	10° 24 '39	1°57'23				
min. Earth dist.	-4110 May 04 j 22:39	10° 24 '49	29.22589 AU	conjunction	-4102 Nov 21 j 00:12	29° 00 '02	1°19'47
direct	-4110 Jul 24 j 01:10	9° 01 '26		minimum elong	-4102 Nov 21 j 00:12	29° 00 '02	1°19'43
				max. Earth dist.	-4102 Nov 21 j 11:22	29° 01 '05	31.16279 AU
conjunction	-4110 Nov 03 j 21:42	11° 29 '13	1°48'24		-4102 Dec 18 j 02:09	0° 00 '00	
minimum elong	-4110 Nov 03 j 21:42	11° 29 '13	1°48'23	retrograde	-4101 Mar 06 j 02:44	1° 31 '20	
max. Earth dist.	-4110 Nov 04 j 01:16	11° 29 '34	31.22025 AU	opposition	-4101 May 25 j 22:43	0° 07 '32	1°23'00
retrograde	-4109 Feb 16 j 03:48	13° 59 '08		min. Earth dist.	-4101 May 25 j 11:37	0° 08 '18	29.15931 AU
opposition	-4109 May 07 j 14:12	12° 35 '46	1°54'11		-4101 May 30 j 14:07	30° 00 '00	
min. Earth dist.	-4109 May 07 j 09:33	12° 36 '05	29.21670 AU	direct	-4101 Aug 13 j 04:38	28° 44 '46	
direct	-4109 Jul 26 j 14:07	11° 12 '33			-4101 Oct 21 j 07:27	0° 00 '00	
conjunction	-4109 Nov 06 j 06:47	13° 40 '15	1°45'20	conjunction	-4101 Nov 23 j 10:01	1° 12 '08	1°15'37
minimum elong	-4109 Nov 06 j 06:48	13° 40 '15	1°45'17	minimum elong	-4101 Nov 23 j 10:01	1° 12 '08	1°15'32
max. Earth dist.	-4109 Nov 06 j 10:59	13° 40 '39	31.21121 AU	max. Earth dist.	-4101 Nov 23 j 21:53	1° 13 '15	31.15423 AU
retrograde	-4108 Feb 18 j 16:20	16° 10 '17		retrograde	-4100 Mar 07 j 16:32	3° 43 '35	
opposition	-4108 May 09 j 03:18	14° 46 '49	1°50'50	opposition	-4100 May 27 j 11:47	2° 19 '44	1°18'29
min. Earth dist.	-4108 May 08 j 22:28	14° 47 '09	29.20800 AU	min. Earth dist.	-4100 May 26 j 23:07	2° 20 '35	29.14992 AU
direct	-4108 Jul 28 j 01:14	13° 23 '38		direct	-4100 Aug 14 j 17:18	0° 56 '58	
conjunction	-4108 Nov 07 j 15:57	15° 51 '15	1°42'07	conjunction	-4100 Nov 24 j 19:42	3° 24 '18	1°11'20
minimum elong	-4108 Nov 07 j 15:58	15° 51 '15	1°42'04	minimum elong	-4100 Nov 24 j 19:43	3° 24 '18	1°11'15
max. Earth dist.	-4108 Nov 07 j 21:59	15° 51 '49	31.20292 AU	max. Earth dist.	-4100 Nov 25 j 07:34	3° 25 '25	31.14414 AU
retrograde	-4107 Feb 20 j 02:41	18° 21 '25		retrograde	-4099 Mar 10 j 06:04	5° 55 '54	
opposition	-4107 May 11 j 16:14	16° 57 '53	1°47'18	opposition	-4099 May 30 j 01:01	4° 31 '57	1°13'51
min. Earth dist.	-4107 May 11 j 09:24	16° 58 '21	29.20002 AU	min. Earth dist.	-4099 May 29 j 12:44	4° 32 '47	29.13921 AU
direct	-4107 Jul 30 j 13:47	15° 34 '44		direct	-4099 Aug 17 j 04:08	3° 09 '11	
conjunction	-4107 Nov 10 j 01:04	18° 02 '17	1°38'45	conjunction	-4099 Nov 27 j 05:36	5° 36 '27	1°06'57
minimum elong	-4107 Nov 10 j 01:04	18° 02 '17	1°38'41	minimum elong	-4099 Nov 27 j 05:37	5° 36 '27	1°06'51
max. Earth dist.	-4107 Nov 10 j 07:17	18° 02 '52	31.19550 AU	max. Earth dist.	-4099 Nov 27 j 18:54	5° 37 '43	31.13301 AU
retrograde	-4106 Feb 22 j 14:39	20° 32 '38		retrograde	-4098 Mar 12 j 17:13	8° 08 '10	

Attention, astronomical year style is used: The year -4098 in astronomical counting style is the year 4099 BCE in historical counting style.

opposition	-4098 Jun 01 j 14:02	6°M44'07	1°09'07	opposition	-4090 Jun 19 j 20:55	24°M21'14	0°28'08
min. Earth dist.	-4098 Jun 01 j 00:16	6°M45'03	29.12756 AU	min. Earth dist.	-4090 Jun 19 j 01:30	24°M22'34	29.05438 AU
direct	-4098 Aug 19 j 16:57	5°M21'20		direct	-4090 Sep 06 j 07:28	22°M58'33	
conjunction	-4098 Nov 29 j 15:18	7°M48'32	1°02'29	conjunction	-4090 Dec 17 j 00:02	25°M25'37	0°23'53
minimum elong	-4098 Nov 29 j 15:19	7°M48'32	1°02'23	minimum elong	-4090 Dec 17 j 00:03	25°M25'37	0°23'44
max. Earth dist.	-4098 Nov 30 j 04:22	7°M49'46	31.12120 AU	max. Earth dist.	-4090 Dec 17 j 20:52	25°M27'35	31.05050 AU
retrograde	-4097 Mar 15 j 06:11	10°M20'23		retrograde	-4089 Apr 02 j 08:48	27°M58'37	
opposition	-4097 Jun 04 j 03:06	8°M56'12	1°04'17	opposition	-4089 Jun 22 j 09:41	26°M33'59	0°22'44
min. Earth dist.	-4097 Jun 03 j 13:03	8°M57'09	29.11569 AU	min. Earth dist.	-4089 Jun 21 j 13:05	26°M35'23	29.04691 AU
direct	-4097 Aug 22 j 04:28	7°M33'23		direct	-4089 Sep 08 j 19:54	25°M11'19	
conjunction	-4097 Dec 02 j 01:14	10°M00'32	0°57'55	conjunction	-4089 Dec 19 j 10:41	27°M38'25	0°18'48
minimum elong	-4097 Dec 02 j 01:14	10°M00'32	0°57'47	minimum elong	-4089 Dec 19 j 10:41	27°M38'25	0°18'39
max. Earth dist.	-4097 Dec 02 j 16:15	10°M01'57	31.10939 AU	max. Earth dist.	-4089 Dec 20 j 06:46	27°M40'18	31.04259 AU
retrograde	-4096 Mar 16 j 17:06	12°M32'29			-4088 Mar 08 j 03:48	0° 2	
opposition	-4096 Jun 05 j 15:52	11°M08'12	0°59'22	retrograde	-4088 Apr 03 j 23:20	0° 2 11'34	
min. Earth dist.	-4096 Jun 05 j 00:51	11°M09'13	29.10408 AU		-4088 May 01 j 02:59	30° R M	
direct	-4096 Aug 23 j 17:17	9°M45'22		opposition	-4088 Jun 23 j 22:29	28°M46'53	0°17'16
conjunction	-4096 Dec 03 j 11:02	12°M12'27	0°53'16	min. Earth dist.	-4088 Jun 23 j 02:09	28°M48'16	29.03854 AU
minimum elong	-4096 Dec 03 j 11:02	12°M12'27	0°53'09	direct	-4088 Sep 10 j 06:55	27°M24'14	
max. Earth dist.	-4096 Dec 04 j 02:05	12°M13'52	31.09829 AU	conjunction	-4088 Dec 20 j 21:35	29°M51'21	0°13'42
retrograde	-4095 Mar 19 j 05:27	14°M44'32		minimum elong	-4088 Dec 20 j 21:35	29°M51'21	0°13'33
opposition	-4095 Jun 08 j 04:47	13°M20'09	0°54'21	behind sun begin	-4088 Dec 20 j 17:58	29°M51'01	
min. Earth dist.	-4095 Jun 07 j 12:32	13°M21'15	29.09351 AU	behind sun end	-4088 Dec 21 j 01:13	29°M51'41	
direct	-4095 Aug 26 j 03:33	11°M57'19		max. Earth dist.	-4088 Dec 21 j 19:02	29°M53'22	31.03362 AU
conjunction	-4095 Dec 05 j 20:54	14°M24'21	0°48'32		-4088 Dec 24 j 16:56	0° 2	
minimum elong	-4095 Dec 05 j 20:54	14°M24'21	0°48'24	retrograde	-4087 Apr 06 j 11:34	2° 2 24'38	
max. Earth dist.	-4095 Dec 06 j 13:44	14°M25'57	31.08823 AU	opposition	-4087 Jun 26 j 11:20	0° 2 59'54	0°11'48
	-4095 Dec 21 j 16:13	15°M		min. Earth dist.	-4087 Jun 25 j 14:35	1° 2 01'19	29.02893 AU
retrograde	-4094 Mar 21 j 15:30	16°M56'35			-4087 Aug 06 j 02:37	30° R M	
opposition	-4094 Jun 10 j 17:43	15°M32'07	0°49'15	direct	-4087 Sep 12 j 19:41	29°M37'14	
min. Earth dist.	-4094 Jun 10 j 01:01	15°M33'16	29.08401 AU		-4087 Oct 19 j 07:18	0° 2	
	-4094 Jun 30 j 21:20	15° R M		conjunction	-4087 Dec 23 j 08:21	2° 2 04'22	0°08'35
direct	-4094 Aug 28 j 14:43	14°M09'18		minimum elong	-4087 Dec 23 j 08:20	2° 2 04'22	0°08'26
	-4094 Oct 23 j 03:36	15°M		behind sun begin	-4087 Dec 23 j 02:40	2° 2 03'51	
conjunction	-4094 Dec 08 j 06:55	16°M36'19	0°43'44	behind sun end	-4087 Dec 23 j 14:00	2° 2 04'52	
minimum elong	-4094 Dec 08 j 06:55	16°M36'19	0°43'37	max. Earth dist.	-4087 Dec 24 j 05:09	2° 2 06'20	31.02358 AU
max. Earth dist.	-4094 Dec 09 j 00:13	16°M37'57	31.07943 AU	retrograde	-4086 Apr 09 j 00:55	4° 2 37'46	
retrograde	-4093 Mar 24 j 04:52	19°M08'41		min. Earth dist.	-4086 Jun 28 j 03:00	3° 2 14'25	29.01842 AU
min. Earth dist.	-4093 Jun 12 j 11:56	17°M45'25	29.07572 AU	opposition	-4086 Jun 29 j 00:11	3° 2 12'58	0°06'18
opposition	-4093 Jun 13 j 06:22	17°M44'10	0°44'04	direct	-4086 Sep 15 j 06:25	1° 2 50'16	
direct	-4093 Aug 31 j 00:25	16°M21'22		conjunction	-4086 Dec 25 j 19:22	4° 2 17'24	0°03'27
conjunction	-4093 Dec 10 j 17:01	18°M48'22	0°38'51	minimum elong	-4086 Dec 25 j 19:22	4° 2 17'24	0°03'18
minimum elong	-4093 Dec 10 j 17:01	18°M48'22	0°38'43	behind sun begin	-4086 Dec 25 j 12:58	4° 2 16'49	
max. Earth dist.	-4093 Dec 11 j 11:18	18°M50'06	31.07155 AU	behind sun end	-4086 Dec 26 j 01:47	4° 2 17'58	
retrograde	-4092 Mar 25 j 16:37	21°M20'54		max. Earth dist.	-4086 Dec 26 j 17:14	4° 2 19'28	31.01263 AU
opposition	-4092 Jun 14 j 19:15	19°M56'21	0°38'49	retrograde	-4085 Apr 11 j 11:34	6° 2 50'54	
min. Earth dist.	-4092 Jun 14 j 01:03	19°M57'35	29.06823 AU	opposition	-4085 Jul 01 j 12:46	5° 2 26'01	0°00'48
direct	-4092 Sep 01 j 10:29	18°M33'35		min. Earth dist.	-4085 Jun 30 j 15:49	5° 2 27'27	29.00726 AU
conjunction	-4092 Dec 12 j 03:08	21°M00'35	0°33'55	desc. node	-4085 Aug 23 j 14:17	4° 2 13'47	
minimum elong	-4092 Dec 12 j 03:08	21°M00'35	0°33'47	direct	-4085 Sep 17 j 18:03	4° 2 03'18	
max. Earth dist.	-4092 Dec 12 j 22:35	21°M02'26	31.06447 AU	conjunction	-4085 Dec 28 j 06:20	6° 2 30'25	0°-1'-48
retrograde	-4091 Mar 28 j 06:15	23°M33'17		minimum elong	-4085 Dec 28 j 06:20	6° 2 30'25	0°01'59
opposition	-4091 Jun 17 j 08:02	22°M08'42	0°33'31	behind sun begin	-4085 Dec 27 j 23:53	6° 2 29'50	
min. Earth dist.	-4091 Jun 16 j 12:07	22°M10'03	29.06126 AU	behind sun end	-4085 Dec 28 j 12:46	6° 2 31'00	
direct	-4091 Sep 03 j 21:54	20°M45'58		max. Earth dist.	-4085 Dec 29 j 04:13	6° 2 32'29	31.00154 AU
conjunction	-4091 Dec 14 j 13:27	23°M13'00	0°28'55	retrograde	-4084 Apr 13 j 01:20	9° 2 04'00	
minimum elong	-4091 Dec 14 j 13:27	23°M13'00	0°28'47	min. Earth dist.	-4084 Jul 02 j 03:05	7° 2 40'35	28.99629 AU
max. Earth dist.	-4091 Dec 15 j 08:56	23°M14'50	31.05756 AU	opposition	-4084 Jul 03 j 01:19	7° 2 39'03	0°-4'-42
retrograde	-4090 Mar 30 j 19:57	25°M45'51		direct	-4084 Sep 19 j 04:26	6° 2 16'17	
				conjunction	-4084 Dec 29 j 17:11	8° 2 43'25	0°-6'-57

Attention, astronomical year style is used: The year -4084 in astronomical counting style is the year 4085 BCE in historical counting style.

minimum elong	-4084 Dec 29 j 17:11	8° \mathring{A} 43'25	0°07'08	conjunction	-4075 Jan 16 j 13:29	26° \mathring{A} 31'43	0°-47'-13
behind sun begin	-4084 Dec 29 j 11:14	8° \mathring{A} 42'53		minimum elong	-4075 Jan 16 j 13:29	26° \mathring{A} 31'43	0°47'25
behind sun end	-4084 Dec 29 j 23:09	8° \mathring{A} 43'57		max. Earth dist.	-4075 Jan 17 j 14:47	26° \mathring{A} 34'06	30.93475 AU
max. Earth dist.	-4084 Dec 30 j 15:48	8° \mathring{A} 45'33	30.99073 AU	retrograde	-4075 May 04 j 01:52	29° \mathring{A} 06'17	
retrograde	-4083 Apr 15 j 12:20	11° \mathring{A} 17'07		opposition	-4075 Jul 23 j 17:09	27° \mathring{A} 41'05	0°-53'-8
opposition	-4083 Jul 05 j 13:58	9° \mathring{A} 52'05	0°-10'-12	min. Earth dist.	-4075 Jul 22 j 16:37	27° \mathring{A} 42'47	28.93149 AU
min. Earth dist.	-4083 Jul 04 j 16:08	9° \mathring{A} 53'36	28.98598 AU	direct	-4075 Oct 09 j 08:28	26° \mathring{A} 18'16	
direct	-4083 Sep 21 j 14:50	8° \mathring{A} 29'18					
				conjunction	-4074 Jan 19 j 01:44	28° \mathring{A} 45'56	0°-52'-2
conjunction	-4082 Jan 01 j 04:21	10° \mathring{A} 56'27	0°-12'-4	minimum elong	-4074 Jan 19 j 01:44	28° \mathring{A} 45'56	0°52'14
minimum elong	-4082 Jan 01 j 04:21	10° \mathring{A} 56'27	0°12'15	max. Earth dist.	-4074 Jan 20 j 02:53	28° \mathring{A} 48'18	30.92681 AU
behind sun begin	-4082 Jan 01 j 00:01	10° \mathring{A} 56'03			-4074 Feb 22 j 03:35	0° \mathring{B}	
behind sun end	-4082 Jan 01 j 08:41	10° \mathring{A} 56'50		retrograde	-4074 May 06 j 12:47	1° \mathring{B} 20'33	
max. Earth dist.	-4082 Jan 02 j 03:58	10° \mathring{A} 58'41	30.98098 AU		-4074 Jul 23 j 09:58	30° \mathring{R} \mathring{A}	
retrograde	-4082 Apr 18 j 01:30	13° \mathring{A} 30'15		min. Earth dist.	-4074 Jul 25 j 06:11	29° \mathring{A} 56'56	28.92307 AU
min. Earth dist.	-4082 Jul 07 j 02:57	12° \mathring{A} 06'47	28.97681 AU	opposition	-4074 Jul 26 j 05:30	29° \mathring{A} 55'19	0°-58'-14
opposition	-4082 Jul 08 j 02:20	12° \mathring{A} 05'10	0°-15'-41	direct	-4074 Oct 11 j 19:12	28° \mathring{A} 32'27	
direct	-4082 Sep 24 j 01:56	10° \mathring{A} 42'21			-4074 Dec 25 j 07:00	0° \mathring{B}	
conjunction	-4081 Jan 03 j 15:29	13° \mathring{A} 09'33	0°-17'-11	conjunction	-4073 Jan 21 j 14:09	1° \mathring{B} 00'09	0°-56'-46
minimum elong	-4081 Jan 03 j 15:29	13° \mathring{A} 09'33	0°17'22	minimum elong	-4073 Jan 21 j 14:08	1° \mathring{B} 00'08	0°56'58
max. Earth dist.	-4081 Jan 04 j 15:01	13° \mathring{A} 11'46	30.97233 AU	max. Earth dist.	-4073 Jan 22 j 15:27	1° \mathring{B} 02'32	30.91796 AU
retrograde	-4081 Apr 20 j 14:42	15° \mathring{A} 43'29		retrograde	-4073 May 09 j 01:48	3° \mathring{B} 34'47	
opposition	-4081 Jul 10 j 14:51	14° \mathring{A} 18'21	0°-21'-9	opposition	-4073 Jul 28 j 17:39	2° \mathring{B} 09'29	-1°-3'-16
min. Earth dist.	-4081 Jul 09 j 15:56	14° \mathring{A} 19'56	28.96885 AU	min. Earth dist.	-4073 Jul 27 j 17:33	2° \mathring{B} 11'10	28.91380 AU
direct	-4081 Sep 26 j 10:51	12° \mathring{A} 55'32		direct	-4073 Oct 14 j 06:45	0° \mathring{B} 46'33	
conjunction	-4080 Jan 06 j 02:50	15° \mathring{A} 22'47	0°-22'-17	conjunction	-4072 Jan 24 j 02:20	3° \mathring{B} 14'17	-1°-1'-25
minimum elong	-4080 Jan 06 j 02:49	15° \mathring{A} 22'47	0°22'29	minimum elong	-4072 Jan 24 j 02:20	3° \mathring{B} 14'17	1°01'37
max. Earth dist.	-4080 Jan 07 j 03:48	15° \mathring{A} 25'08	30.96492 AU	max. Earth dist.	-4072 Jan 25 j 02:56	3° \mathring{B} 16'36	30.90836 AU
retrograde	-4080 Apr 22 j 03:56	17° \mathring{A} 56'49		retrograde	-4072 May 10 j 14:15	5° \mathring{B} 48'58	
min. Earth dist.	-4080 Jul 11 j 02:55	16° \mathring{A} 33'21	28.96194 AU	min. Earth dist.	-4072 Jul 29 j 06:49	4° \mathring{B} 25'12	28.90426 AU
opposition	-4080 Jul 12 j 03:09	16° \mathring{A} 31'40	0°-26'-36	opposition	-4072 Jul 30 j 05:51	4° \mathring{B} 23'36	-1°-8'-11
direct	-4080 Sep 27 j 23:10	15° \mathring{A} 08'52		direct	-4072 Oct 15 j 16:10	3° \mathring{B} 00'35	
conjunction	-4079 Jan 07 j 14:09	17° \mathring{A} 36'11	0°-27'-21	conjunction	-4071 Jan 25 j 14:49	5° \mathring{B} 28'22	-1°-5'-59
minimum elong	-4079 Jan 07 j 14:08	17° \mathring{A} 36'11	0°27'33	minimum elong	-4071 Jan 25 j 14:49	5° \mathring{B} 28'22	1°06'11
max. Earth dist.	-4079 Jan 08 j 14:34	17° \mathring{A} 38'29	30.95854 AU	max. Earth dist.	-4071 Jan 26 j 16:22	5° \mathring{B} 30'46	30.89891 AU
retrograde	-4079 Apr 24 j 19:24	20° \mathring{A} 10'20		retrograde	-4071 May 13 j 03:00	8° \mathring{B} 03'03	
opposition	-4079 Jul 14 j 15:39	18° \mathring{A} 45'11	0°-32'00	opposition	-4071 Aug 01 j 17:49	6° \mathring{B} 37'38	-1°-13'00
min. Earth dist.	-4079 Jul 13 j 15:33	18° \mathring{A} 46'50	28.95606 AU	min. Earth dist.	-4071 Jul 31 j 17:56	6° \mathring{B} 39'18	28.89506 AU
direct	-4079 Sep 30 j 09:55	17° \mathring{A} 22'23		direct	-4071 Oct 18 j 04:52	5° \mathring{B} 14'32	
conjunction	-4078 Jan 10 j 01:45	19° \mathring{A} 49'46	0°-32'-24	conjunction	-4070 Jan 28 j 03:10	7° \mathring{B} 42'23	-1°-10'-26
minimum elong	-4078 Jan 10 j 01:44	19° \mathring{A} 49'46	0°32'35	minimum elong	-4070 Jan 28 j 03:10	7° \mathring{B} 42'23	1°10'38
max. Earth dist.	-4078 Jan 11 j 03:40	19° \mathring{A} 52'13	30.95287 AU	max. Earth dist.	-4070 Jan 29 j 03:45	7° \mathring{B} 44'41	30.89004 AU
retrograde	-4078 Apr 27 j 08:06	22° \mathring{A} 24'03		retrograde	-4070 May 15 j 17:21	10° \mathring{B} 17'06	
min. Earth dist.	-4078 Jul 16 j 03:38	21° \mathring{A} 00'35	28.95052 AU	min. Earth dist.	-4070 Aug 03 j 06:28	8° \mathring{B} 53'15	28.88678 AU
opposition	-4078 Jul 17 j 04:03	20° \mathring{A} 58'53	0°-37'-22	opposition	-4070 Aug 04 j 05:52	8° \mathring{B} 51'37	-1°-17'-43
direct	-4078 Oct 02 j 22:19	19° \mathring{A} 36'07		direct	-4070 Oct 20 j 15:28	7° \mathring{B} 28'28	
conjunction	-4077 Jan 12 j 13:30	22° \mathring{A} 03'35	0°-37'-23	conjunction	-4069 Jan 30 j 15:51	9° \mathring{B} 56'23	-1°-14'-48
minimum elong	-4077 Jan 12 j 13:30	22° \mathring{A} 03'35	0°37'35	minimum elong	-4069 Jan 30 j 15:51	9° \mathring{B} 56'23	1°14'59
max. Earth dist.	-4077 Jan 13 j 14:39	22° \mathring{A} 05'57	30.94740 AU	max. Earth dist.	-4069 Jan 31 j 17:39	9° \mathring{B} 58'49	30.88215 AU
retrograde	-4077 Apr 29 j 22:38	24° \mathring{A} 37'57		retrograde	-4069 May 18 j 05:43	12° \mathring{B} 31'08	
opposition	-4077 Jul 19 j 16:19	23° \mathring{A} 12'48	0°-42'-41	opposition	-4069 Aug 06 j 17:38	11° \mathring{B} 05'38	-1°-22'-19
min. Earth dist.	-4077 Jul 18 j 15:49	23° \mathring{A} 14'30	28.94500 AU	min. Earth dist.	-4069 Aug 05 j 17:58	11° \mathring{B} 07'18	28.87951 AU
direct	-4077 Oct 05 j 08:51	21° \mathring{A} 50'02		direct	-4069 Oct 23 j 03:39	9° \mathring{B} 42'26	
conjunction	-4076 Jan 15 j 01:31	24° \mathring{A} 17'35	0°-42'-20	conjunction	-4068 Feb 02 j 04:24	12° \mathring{B} 10'27	-1°-19'-2
minimum elong	-4076 Jan 15 j 01:31	24° \mathring{A} 17'35	0°42'32	minimum elong	-4068 Feb 02 j 04:24	12° \mathring{B} 10'27	1°19'13
max. Earth dist.	-4076 Jan 16 j 03:22	24° \mathring{A} 20'01	30.94146 AU	max. Earth dist.	-4068 Feb 03 j 05:22	12° \mathring{B} 12'48	30.87556 AU
retrograde	-4076 May 01 j 11:10	26° \mathring{A} 52'03		retrograde	-4068 May 19 j 20:41	14° \mathring{B} 45'14	
min. Earth dist.	-4076 Jul 20 j 04:52	25° \mathring{A} 28'33	28.93872 AU	min. Earth dist.	-4068 Aug 07 j 05:40	13° \mathring{B} 21'24	28.87367 AU
opposition	-4076 Jul 21 j 04:46	25° \mathring{A} 26'53	0°-47'-57	opposition	-4068 Aug 08 j 05:33	13° \mathring{B} 19'44	-1°-26'-47
direct	-4076 Oct 06 j 21:07	24° \mathring{A} 04'07		direct	-4068 Oct 24 j 14:25	11° \mathring{B} 56'30	

Attention, astronomical year style is used: The year -4067 in astronomical counting style is the year 4068 BCE in historical counting style.

conjunction	-4067 Feb 03 j 17:02	14°☾24'37	-1°-23'-10		-4060 Nov 28 j 22:32	0°☾	
minimum elong	-4067 Feb 03 j 17:01	14°☾24'37	1°23'21				
max. Earth dist.	-4067 Feb 04 j 18:55	14°☾27'03	30.87020 AU	conjunction	-4059 Feb 22 j 03:36	2°☾23'34	-1°-51'-11
retrograde	-4067 May 22 j 09:51	16°☾59'28		minimum elong	-4059 Feb 22 j 03:35	2°☾23'34	1°51'21
opposition	-4067 Aug 10 j 17:28	15°☾33'58	-1°-31'-8	max. Earth dist.	-4059 Feb 23 j 01:16	2°☾25'36	30.83342 AU
min. Earth dist.	-4067 Aug 09 j 18:03	15°☾35'37	28.86893 AU	retrograde	-4059 Jun 09 j 19:53	4°☾58'30	
direct	-4067 Oct 27 j 02:45	14°☾10'44		opposition	-4059 Aug 28 j 14:56	3°☾33'03	-2°00'-27
				min. Earth dist.	-4059 Aug 27 j 18:53	3°☾34'28	28.83186 AU
conjunction	-4066 Feb 06 j 05:54	16°☾38'58	-1°-27'-10	direct	-4059 Nov 13 j 19:49	2°☾09'25	
minimum elong	-4066 Feb 06 j 05:54	16°☾38'58	1°27'21				
max. Earth dist.	-4066 Feb 07 j 07:15	16°☾41'21	30.86604 AU	conjunction	-4058 Feb 24 j 17:20	4°☾38'28	-1°-53'-59
retrograde	-4066 May 25 j 00:44	19°☾13'52		minimum elong	-4058 Feb 24 j 17:20	4°☾38'28	1°54'08
min. Earth dist.	-4066 Aug 12 j 05:09	17°☾50'05	28.86522 AU	max. Earth dist.	-4058 Feb 25 j 15:29	4°☾40'32	30.82770 AU
opposition	-4066 Aug 13 j 05:08	17°☾48'24	-1°-35'-20	retrograde	-4058 Jun 12 j 08:37	7°☾13'19	
direct	-4066 Oct 29 j 14:05	16°☾25'09		min. Earth dist.	-4058 Aug 30 j 07:00	5°☾49'11	28.82660 AU
				opposition	-4058 Aug 31 j 02:12	5°☾47'50	-2°-3'-20
conjunction	-4065 Feb 08 j 18:57	18°☾53'31	-1°-31'-2	direct	-4058 Nov 16 j 08:56	4°☾24'07	
minimum elong	-4065 Feb 08 j 18:57	18°☾53'30	1°31'13				
max. Earth dist.	-4065 Feb 09 j 20:14	18°☾55'53	30.86247 AU	conjunction	-4057 Feb 27 j 07:01	6°☾53'15	-1°-56'-36
retrograde	-4065 May 27 j 12:29	21°☾28'28		minimum elong	-4057 Feb 27 j 07:01	6°☾53'15	1°56'46
opposition	-4065 Aug 15 j 17:00	20°☾03'03	-1°-39'-24	max. Earth dist.	-4057 Feb 28 j 04:12	6°☾55'14	30.82302 AU
min. Earth dist.	-4065 Aug 14 j 18:16	20°☾04'38	28.86190 AU	retrograde	-4057 Jun 14 j 22:43	9°☾28'02	
direct	-4065 Nov 01 j 00:35	18°☾39'48		opposition	-4057 Sep 02 j 13:27	8°☾02'33	-2°-6'-3
				min. Earth dist.	-4057 Sep 01 j 17:49	8°☾03'56	28.82260 AU
conjunction	-4064 Feb 11 j 08:05	21°☾08'17	-1°-34'-46	direct	-4057 Nov 18 j 21:05	6°☾38'45	
minimum elong	-4064 Feb 11 j 08:05	21°☾08'17	1°34'57				
max. Earth dist.	-4064 Feb 12 j 09:21	21°☾10'40	30.85918 AU	conjunction	-4056 Feb 29 j 20:38	9°☾07'58	-1°-59'-3
retrograde	-4064 May 29 j 02:32	23°☾43'17		minimum elong	-4056 Feb 29 j 20:38	9°☾07'58	1°59'12
min. Earth dist.	-4064 Aug 16 j 05:27	22°☾19'32	28.85851 AU	max. Earth dist.	-4056 Mar 01 j 17:46	9°☾09'56	30.81954 AU
opposition	-4064 Aug 17 j 04:42	22°☾17'54	-1°-43'-19	retrograde	-4056 Jun 16 j 11:02	11°☾42'42	
direct	-4064 Nov 02 j 11:52	20°☾54'38		min. Earth dist.	-4056 Sep 03 j 06:17	10°☾18'31	28.81997 AU
				opposition	-4056 Sep 04 j 00:48	10°☾17'12	-2°-8'-34
conjunction	-4063 Feb 12 j 21:24	23°☾23'15	-1°-38'-21	direct	-4056 Nov 20 j 08:20	8°☾53'21	
minimum elong	-4063 Feb 12 j 21:23	23°☾23'15	1°38'33				
max. Earth dist.	-4063 Feb 13 j 21:33	23°☾25'31	30.85543 AU	conjunction	-4055 Mar 03 j 10:28	11°☾22'40	-2°-1'-18
retrograde	-4063 May 31 j 15:14	25°☾58'17		minimum elong	-4055 Mar 03 j 10:27	11°☾22'40	2°01'28
opposition	-4063 Aug 19 j 16:33	24°☾32'55	-1°-47'-5	max. Earth dist.	-4055 Mar 04 j 07:28	11°☾24'38	30.81775 AU
min. Earth dist.	-4063 Aug 18 j 18:52	24°☾34'27	28.85455 AU	retrograde	-4055 Jun 19 j 01:35	13°☾57'20	
direct	-4063 Nov 04 j 20:49	23°☾09'37		opposition	-4055 Sep 06 j 11:53	12°☾31'53	-2°-10'-53
				min. Earth dist.	-4055 Sep 05 j 16:44	12°☾33'14	28.81894 AU
conjunction	-4062 Feb 15 j 11:00	25°☾38'20	-1°-41'-48	direct	-4055 Nov 22 j 20:26	11°☾07'59	
minimum elong	-4062 Feb 15 j 10:59	25°☾38'20	1°41'59				
max. Earth dist.	-4062 Feb 16 j 11:19	25°☾40'38	30.85100 AU	conjunction	-4054 Mar 06 j 00:21	13°☾37'24	-2°-3'-23
retrograde	-4062 Jun 03 j 03:40	28°☾13'23		minimum elong	-4054 Mar 06 j 00:21	13°☾37'24	2°03'32
min. Earth dist.	-4062 Aug 21 j 06:22	26°☾49'34	28.84961 AU	max. Earth dist.	-4054 Mar 06 j 20:29	13°☾39'18	30.81735 AU
opposition	-4062 Aug 22 j 04:15	26°☾48'01	-1°-50'-41		-4054 Apr 13 j 17:08	15°☾	
direct	-4062 Nov 07 j 09:47	25°☾24'40		retrograde	-4054 Jun 21 j 13:38	16°☾12'03	
					-4054 Sep 01 j 01:44	15°☾	
conjunction	-4061 Feb 18 j 00:31	27°☾53'29	-1°-45'-5	opposition	-4054 Sep 08 j 23:11	14°☾46'38	-2°-13'00
minimum elong	-4061 Feb 18 j 00:31	27°☾53'29	1°45'16	min. Earth dist.	-4054 Sep 08 j 05:26	14°☾47'53	28.81927 AU
max. Earth dist.	-4061 Feb 18 j 23:03	27°☾55'36	30.84556 AU	direct	-4054 Nov 25 j 06:07	13°☾22'43	
	-4061 Apr 24 j 13:03	0°☾			-4053 Feb 12 j 21:28	15°☾	
retrograde	-4061 Jun 05 j 17:01	0°☾28'30					
	-4061 Jul 18 j 16:47	30°☾		conjunction	-4053 Mar 08 j 14:27	15°☾52'15	-2°-5'-16
opposition	-4061 Aug 24 j 15:53	29°☾03'07	-1°-54'-7	minimum elong	-4053 Mar 08 j 14:26	15°☾52'15	2°05'26
min. Earth dist.	-4061 Aug 23 j 19:11	29°☾04'35	28.84390 AU	max. Earth dist.	-4053 Mar 09 j 10:51	15°☾54'10	30.81823 AU
direct	-4061 Nov 09 j 20:05	27°☾39'40		retrograde	-4053 Jun 24 j 01:54	18°☾26'51	
	-4060 Feb 16 j 18:50	0°☾		opposition	-4053 Sep 11 j 10:11	17°☾01'31	-2°-14'-55
				min. Earth dist.	-4053 Sep 10 j 16:12	17°☾02'47	28.82054 AU
conjunction	-4060 Feb 20 j 14:11	0°☾08'35	-1°-48'-13	direct	-4053 Nov 27 j 18:26	15°☾37'35	
minimum elong	-4060 Feb 20 j 14:11	0°☾08'35	1°48'23				
max. Earth dist.	-4060 Feb 21 j 13:17	0°☾10'45	30.83952 AU	conjunction	-4052 Mar 10 j 04:29	18°☾07'15	-2°-6'-58
retrograde	-4060 Jun 07 j 05:20	2°☾43'33		minimum elong	-4052 Mar 10 j 04:29	18°☾07'15	2°07'06
min. Earth dist.	-4060 Aug 25 j 06:59	1°☾19'35	28.83772 AU	max. Earth dist.	-4052 Mar 10 j 23:12	18°☾09'01	30.81981 AU
opposition	-4060 Aug 26 j 03:25	1°☾18'08	-1°-57'-22	retrograde	-4052 Jun 25 j 15:04	20°☾41'50	
	-4060 Oct 24 j 16:21	30°☾		opposition	-4052 Sep 12 j 21:24	19°☾16'33	-2°-16'-37
direct	-4060 Nov 11 j 08:09	29°☾54'36		min. Earth dist.	-4052 Sep 12 j 04:38	19°☾17'45	28.82239 AU

Attention, astronomical year style is used: The year -4052 in astronomical counting style is the year 4053 BCE in historical counting style.

direct	-4052 Nov 29 j 03:57	17° \approx 52'36		direct	-4044 Dec 17 j 05:11	5° \approx 53'34	
conjunction	-4051 Mar 12 j 18:47	20° \approx 22'25	-2°-8'-28	conjunction	-4043 Mar 31 j 14:23	8° \approx 24'11	-2°-13'-19
minimum elong	-4051 Mar 12 j 18:47	20° \approx 22'25	2°08'37	minimum elong	-4043 Mar 31 j 14:24	8° \approx 24'11	2°13'25
max. Earth dist.	-4051 Mar 13 j 13:49	20° \approx 24'12	30.82158 AU	max. Earth dist.	-4043 Apr 01 j 01:13	8° \approx 25'12	30.82423 AU
retrograde	-4051 Jun 28 j 03:29	22° \approx 56'57		retrograde	-4043 Jul 16 j 11:43	10° \approx 57'52	
opposition	-4051 Sep 15 j 08:33	21° \approx 31'45	-2°-18'-7	opposition	-4043 Oct 02 j 23:59	9° \approx 32'55	-2°-22'-26
min. Earth dist.	-4051 Sep 14 j 16:26	21° \approx 32'53	28.82393 AU	min. Earth dist.	-4043 Oct 02 j 14:17	9° \approx 33'37	28.82757 AU
direct	-4051 Dec 01 j 15:38	20° \approx 07'46		direct	-4043 Dec 19 j 14:44	8° \approx 08'26	
conjunction	-4050 Mar 15 j 09:11	22° \approx 37'43	-2°-9'-47	conjunction	-4042 Apr 03 j 05:01	10° \approx 39'10	-2°-13'-1
minimum elong	-4050 Mar 15 j 09:11	22° \approx 37'43	2°09'54	minimum elong	-4042 Apr 03 j 05:01	10° \approx 39'10	2°13'05
max. Earth dist.	-4050 Mar 16 j 02:05	22° \approx 39'18	30.82285 AU	max. Earth dist.	-4042 Apr 03 j 16:12	10° \approx 40'12	30.82785 AU
retrograde	-4050 Jun 30 j 17:31	25° \approx 12'12		retrograde	-4042 Jul 18 j 22:46	13° \approx 12'44	
opposition	-4050 Sep 17 j 19:39	23° \approx 47'02	-2°-19'-25	opposition	-4042 Oct 05 j 10:36	11° \approx 47'51	-2°-22'00
min. Earth dist.	-4050 Sep 17 j 04:25	23° \approx 48'07	28.82488 AU	min. Earth dist.	-4042 Oct 05 j 01:18	11° \approx 48'31	28.83178 AU
direct	-4050 Dec 04 j 03:05	22° \approx 23'01		direct	-4042 Dec 22 j 02:21	10° \approx 23'21	
conjunction	-4049 Mar 17 j 23:47	24° \approx 53'06	-2°-10'-53	conjunction	-4041 Apr 05 j 19:29	12° \approx 54'11	-2°-12'-30
minimum elong	-4049 Mar 17 j 23:47	24° \approx 53'06	2°11'01	minimum elong	-4041 Apr 05 j 19:29	12° \approx 54'11	2°12'36
max. Earth dist.	-4049 Mar 18 j 16:33	24° \approx 54'40	30.82325 AU	max. Earth dist.	-4041 Apr 06 j 04:51	12° \approx 55'03	30.83281 AU
retrograde	-4049 Jul 03 j 05:56	27° \approx 27'29		retrograde	-4041 Jul 21 j 11:17	15° \approx 27'39	
opposition	-4049 Sep 20 j 06:51	26° \approx 02'22	-2°-20'-29	opposition	-4041 Oct 07 j 21:19	14° \approx 02'51	-2°-21'-20
min. Earth dist.	-4049 Sep 19 j 17:01	26° \approx 03'21	28.82485 AU	min. Earth dist.	-4041 Oct 07 j 12:36	14° \approx 03'28	28.83733 AU
direct	-4049 Dec 06 j 16:04	24° \approx 38'18		direct	-4041 Dec 24 j 13:28	12° \approx 38'20	
conjunction	-4048 Mar 19 j 14:05	27° \approx 08'28	-2°-11'-48	conjunction	-4040 Apr 07 j 10:00	15° \approx 09'17	-2°-11'-48
minimum elong	-4048 Mar 19 j 14:05	27° \approx 08'28	2°11'54	minimum elong	-4040 Apr 07 j 10:00	15° \approx 09'17	2°11'51
max. Earth dist.	-4048 Mar 20 j 05:07	27° \approx 09'53	30.82296 AU	max. Earth dist.	-4040 Apr 07 j 19:39	15° \approx 10'11	30.83875 AU
retrograde	-4048 Jul 04 j 20:07	29° \approx 42'46		retrograde	-4040 Jul 22 j 22:41	17° \approx 42'39	
opposition	-4048 Sep 21 j 17:53	28° \approx 17'40	-2°-21'-21	opposition	-4040 Oct 09 j 08:04	16° \approx 17'57	-2°-20'-28
min. Earth dist.	-4048 Sep 21 j 04:10	28° \approx 18'39	28.82427 AU	min. Earth dist.	-4040 Oct 09 j 00:40	16° \approx 18'28	28.84349 AU
direct	-4048 Dec 08 j 04:35	26° \approx 53'31		direct	-4040 Dec 26 j 01:35	14° \approx 53'24	
conjunction	-4047 Mar 22 j 04:37	29° \approx 23'48	-2°-12'-30	conjunction	-4039 Apr 10 j 00:41	17° \approx 24'28	-2°-10'-52
minimum elong	-4047 Mar 22 j 04:37	29° \approx 23'48	2°12'38	minimum elong	-4039 Apr 10 j 00:41	17° \approx 24'28	2°10'57
max. Earth dist.	-4047 Mar 22 j 19:02	29° \approx 25'08	30.82214 AU	max. Earth dist.	-4039 Apr 10 j 08:25	17° \approx 25'12	30.84514 AU
retrograde	-4047 Jul 07 j 08:46	1° \approx 57'58		retrograde	-4039 Jul 25 j 12:38	19° \approx 57'44	
opposition	-4047 Sep 24 j 04:50	0° \approx 32'53	-2°-22'00	opposition	-4039 Oct 11 j 18:37	18° \approx 33'07	-2°-19'-22
min. Earth dist.	-4047 Sep 23 j 16:53	0° \approx 33'44	28.82344 AU	min. Earth dist.	-4039 Oct 11 j 11:32	18° \approx 33'38	28.84979 AU
direct	-4047 Oct 13 j 23:42	30° \approx		direct	-4039 Dec 28 j 13:22	17° \approx 08'33	
conjunction	-4046 Mar 24 j 19:11	1° \approx 39'02	-2°-13'-1	conjunction	-4038 Apr 12 j 15:35	19° \approx 39'45	-2°-9'-45
minimum elong	-4046 Mar 24 j 19:12	1° \approx 39'02	2°13'07	minimum elong	-4038 Apr 12 j 15:35	19° \approx 39'45	2°09'48
max. Earth dist.	-4046 Mar 25 j 08:43	1° \approx 40'17	30.82149 AU	max. Earth dist.	-4038 Apr 12 j 22:33	19° \approx 40'24	30.85112 AU
retrograde	-4046 Jul 09 j 23:23	4° \approx 13'05		retrograde	-4038 Jul 28 j 00:58	22° \approx 12'53	
opposition	-4046 Sep 26 j 15:39	2° \approx 48'01	-2°-22'-26	opposition	-4038 Oct 14 j 05:28	20° \approx 48'21	-2°-18'-4
min. Earth dist.	-4046 Sep 26 j 03:30	2° \approx 48'52	28.82293 AU	min. Earth dist.	-4038 Oct 14 j 00:23	20° \approx 48'43	28.85541 AU
direct	-4046 Dec 13 j 05:50	1° \approx 23'42		direct	-4038 Dec 31 j 01:59	19° \approx 23'46	
conjunction	-4045 Mar 27 j 09:35	3° \approx 54'09	-2°-13'-19	conjunction	-4037 Apr 15 j 06:21	21° \approx 55'02	-2°-8'-26
minimum elong	-4045 Mar 27 j 09:35	3° \approx 54'09	2°13'26	minimum elong	-4037 Apr 15 j 06:21	21° \approx 55'02	2°08'29
max. Earth dist.	-4045 Mar 27 j 22:02	3° \approx 55'19	30.82121 AU	max. Earth dist.	-4037 Apr 15 j 11:48	21° \approx 55'33	30.85637 AU
retrograde	-4045 Jul 12 j 10:47	6° \approx 28'05		retrograde	-4037 Jul 30 j 14:53	24° \approx 28'02	
opposition	-4045 Sep 29 j 02:30	5° \approx 03'02	-2°-22'-39	opposition	-4037 Oct 16 j 16:07	23° \approx 03'33	-2°-16'-33
min. Earth dist.	-4045 Sep 28 j 15:59	5° \approx 03'47	28.82320 AU	min. Earth dist.	-4037 Oct 16 j 11:11	23° \approx 03'54	28.86008 AU
direct	-4045 Dec 15 j 16:26	3° \approx 38'40		direct	-4036 Jan 02 j 16:00	21° \approx 38'54	
conjunction	-4044 Mar 29 j 00:05	6° \approx 09'12	-2°-13'-25	conjunction	-4036 Apr 16 j 21:08	24° \approx 10'16	-2°-6'-55
minimum elong	-4044 Mar 29 j 00:05	6° \approx 09'12	2°13'31	minimum elong	-4036 Apr 16 j 21:08	24° \approx 10'16	2°06'57
max. Earth dist.	-4044 Mar 29 j 12:33	6° \approx 10'22	30.82208 AU	max. Earth dist.	-4036 Apr 17 j 01:05	24° \approx 10'38	30.86054 AU
retrograde	-4044 Jul 13 j 22:59	8° \approx 43'00		retrograde	-4036 Aug 01 j 02:43	26° \approx 43'06	
opposition	-4044 Sep 30 j 13:11	7° \approx 18'00	-2°-22'-39	opposition	-4036 Oct 18 j 02:50	25° \approx 18'39	-2°-14'-49
min. Earth dist.	-4044 Sep 30 j 02:25	7° \approx 18'46	28.82465 AU	min. Earth dist.	-4036 Oct 18 j 00:00	25° \approx 18'51	28.86383 AU
				direct	-4035 Jan 04 j 03:30	23° \approx 53'57	
				conjunction	-4035 Apr 19 j 11:57	26° \approx 25'22	-2°-5'-13

Attention, astronomical year style is used: The year -4035 in astronomical counting style is the year 4036 BCE in historical counting style.

minimum elong	-4035 Apr 19 j 11:57	26° ✕ 25'22	2°05'16	minimum elong	-4027 May 08 j 07:34	14° Υ 21'09	1°45'06
max. Earth dist.	-4035 Apr 19 j 15:11	26° ✕ 25'40	30.86399 AU	max. Earth dist.	-4027 May 08 j 03:10	14° Υ 20'44	30.90781 AU
retrograde	-4035 Aug 03 j 15:32	28° ✕ 58'00		retrograde	-4027 Aug 21 j 12:36	16° Υ 52'31	
opposition	-4035 Oct 20 j 13:23	27° ✕ 33'36	-2°-12'-54	opposition	-4027 Nov 07 j 00:41	15° Υ 28'38	-1°-50'-39
min. Earth dist.	-4035 Oct 20 j 10:51	27° ✕ 33'47	28.86681 AU	min. Earth dist.	-4027 Nov 07 j 05:06	15° Υ 28'19	28.91350 AU
direct	-4034 Jan 06 j 17:07	26° ✕ 08'49		direct	-4026 Jan 24 j 16:29	14° Υ 03'33	
conjunction	-4034 Apr 22 j 02:38	28° ✕ 40'17	-2°-3'-20	conjunction	-4026 May 10 j 21:59	16° Υ 35'37	-1°-41'-50
minimum elong	-4034 Apr 22 j 02:38	28° ✕ 40'17	2°03'21	minimum elong	-4026 May 10 j 21:59	16° Υ 35'37	1°41'47
max. Earth dist.	-4034 Apr 22 j 03:47	28° ✕ 40'23	30.86682 AU	max. Earth dist.	-4026 May 10 j 16:55	16° Υ 35'08	30.91716 AU
	-4034 May 29 j 13:22	0° Υ		retrograde	-4026 Aug 24 j 01:44	19° Υ 06'50	
retrograde	-4034 Aug 06 j 03:56	1° Υ 12'44		opposition	-4026 Nov 09 j 10:59	17° Υ 43'04	-1°-47'-4
	-4034 Oct 16 j 03:59	30° ✕		min. Earth dist.	-4026 Nov 09 j 15:42	17° Υ 42'44	28.92254 AU
opposition	-4034 Oct 22 j 23:54	29° ✕ 48'21	-2°-10'-47	direct	-4025 Jan 27 j 06:12	16° Υ 17'59	
min. Earth dist.	-4034 Oct 22 j 22:52	29° ✕ 48'26	28.86961 AU				
direct	-4033 Jan 09 j 03:55	28° ✕ 23'30		conjunction	-4025 May 13 j 12:18	18° Υ 50'07	-1°-38'-24
	-4033 Mar 30 j 13:00	0° Υ		minimum elong	-4025 May 13 j 12:19	18° Υ 50'08	1°38'22
conjunction	-4033 Apr 24 j 17:20	0° Υ 55'00	-2°-1'-15	max. Earth dist.	-4025 May 13 j 05:15	18° Υ 49'28	30.92594 AU
minimum elong	-4033 Apr 24 j 17:21	0° Υ 55'01	2°01'17	retrograde	-4025 Aug 26 j 14:29	21° Υ 21'12	
max. Earth dist.	-4033 Apr 24 j 18:30	0° Υ 55'07	30.86972 AU	opposition	-4025 Nov 11 j 21:30	19° Υ 57'31	-1°-43'-19
retrograde	-4033 Aug 08 j 14:15	3° Υ 27'16		min. Earth dist.	-4025 Nov 12 j 03:43	19° Υ 57'04	28.93100 AU
opposition	-4033 Oct 25 j 10:23	2° Υ 02'56	-2°-8'-28	direct	-4024 Jan 29 j 17:28	18° Υ 32'26	
min. Earth dist.	-4033 Oct 25 j 09:56	2° Υ 02'58	28.87260 AU	conjunction	-4024 May 15 j 02:36	21° Υ 04'37	-1°-34'-49
direct	-4032 Jan 11 j 16:33	0° Υ 38'00		minimum elong	-4024 May 15 j 02:37	21° Υ 04'37	1°34'46
conjunction	-4032 Apr 26 j 07:37	3° Υ 09'33	-1°-59'00	max. Earth dist.	-4024 May 14 j 19:16	21° Υ 03'56	30.93398 AU
minimum elong	-4032 Apr 26 j 07:37	3° Υ 09'33	1°59'00	retrograde	-4024 Aug 28 j 00:37	23° Υ 35'31	
max. Earth dist.	-4032 Apr 26 j 06:49	3° Υ 09'28	30.87313 AU	opposition	-4024 Nov 13 j 07:59	22° Υ 11'55	-1°-39'-25
retrograde	-4032 Aug 10 j 01:49	5° Υ 41'38		min. Earth dist.	-4024 Nov 13 j 15:06	22° Υ 11'24	28.93840 AU
opposition	-4032 Oct 26 j 20:50	4° Υ 17'20	-2°-5'-58	direct	-4023 Jan 31 j 06:47	20° Υ 46'47	
min. Earth dist.	-4032 Oct 26 j 21:00	4° Υ 17'19	28.87646 AU	conjunction	-4023 May 17 j 16:51	23° Υ 19'00	-1°-31'-6
direct	-4031 Jan 13 j 03:47	2° Υ 52'19		minimum elong	-4023 May 17 j 16:52	23° Υ 19'00	1°31'04
conjunction	-4031 Apr 28 j 22:12	5° Υ 23'56	-1°-56'-34	max. Earth dist.	-4023 May 17 j 07:07	23° Υ 18'06	30.94103 AU
minimum elong	-4031 Apr 28 j 22:13	5° Υ 23'56	1°56'35	retrograde	-4023 Aug 30 j 12:07	25° Υ 49'43	
max. Earth dist.	-4031 Apr 28 j 21:43	5° Υ 23'53	30.87749 AU	opposition	-4023 Nov 15 j 18:18	24° Υ 26'10	-1°-35'-22
retrograde	-4031 Aug 12 j 12:03	7° Υ 55'51		min. Earth dist.	-4023 Nov 16 j 02:20	24° Υ 25'36	28.94504 AU
opposition	-4031 Oct 29 j 07:11	6° Υ 31'36	-2°-3'-16	direct	-4022 Feb 02 j 18:03	23° Υ 00'59	
min. Earth dist.	-4031 Oct 29 j 08:33	6° Υ 31'30	28.88134 AU	conjunction	-4022 May 20 j 07:11	25° Υ 33'14	-1°-27'-16
direct	-4030 Jan 15 j 15:35	5° Υ 06'33		minimum elong	-4022 May 20 j 07:12	25° Υ 33'14	1°27'12
conjunction	-4030 May 01 j 12:36	7° Υ 38'13	-1°-53'-58	max. Earth dist.	-4022 May 19 j 21:27	25° Υ 32'20	30.94733 AU
minimum elong	-4030 May 01 j 12:36	7° Υ 38'14	1°53'57	retrograde	-4022 Sep 01 j 22:00	28° Υ 03'45	
max. Earth dist.	-4030 May 01 j 10:22	7° Υ 38'01	30.88318 AU	opposition	-4022 Nov 18 j 04:46	26° Υ 40'14	-1°-31'-12
retrograde	-4030 Aug 15 j 00:42	10° Υ 10'00		min. Earth dist.	-4022 Nov 18 j 14:18	26° Υ 39'34	28.95101 AU
opposition	-4030 Oct 31 j 17:33	8° Υ 45'49	-2°00'-23	direct	-4021 Feb 05 j 05:44	25° Υ 15'00	
min. Earth dist.	-4030 Oct 31 j 18:46	8° Υ 45'43	28.88770 AU	conjunction	-4021 May 22 j 21:01	27° Υ 47'14	-1°-23'-17
direct	-4029 Jan 18 j 03:09	7° Υ 20'43		minimum elong	-4021 May 22 j 21:02	27° Υ 47'14	1°23'14
conjunction	-4029 May 04 j 02:54	9° Υ 52'29	-1°-51'-11	max. Earth dist.	-4021 May 22 j 09:22	27° Υ 46'09	30.95331 AU
minimum elong	-4029 May 04 j 02:55	9° Υ 52'29	1°51'11		-4021 Aug 03 j 04:55	0° ✕	
max. Earth dist.	-4029 May 04 j 00:37	9° Υ 52'16	30.89021 AU	retrograde	-4021 Sep 04 j 09:05	0° ✕ 17'33	
retrograde	-4029 Aug 17 j 11:42	12° Υ 24'07			-4021 Oct 06 j 21:33	30° ✕ Υ	
opposition	-4029 Nov 03 j 04:01	11° Υ 00'01	-1°-57'-19	opposition	-4021 Nov 20 j 15:02	28° Υ 54'04	-1°-26'-53
min. Earth dist.	-4029 Nov 03 j 06:43	10° Υ 59'49	28.89538 AU	min. Earth dist.	-4021 Nov 21 j 00:36	28° Υ 53'24	28.95695 AU
direct	-4028 Jan 20 j 15:39	9° Υ 34'55		direct	-4020 Feb 07 j 17:36	27° Υ 28'45	
conjunction	-4028 May 05 j 17:11	12° Υ 06'46	-1°-48'-14	conjunction	-4020 May 24 j 10:59	0° ✕ 01'00	-1°-19'-12
minimum elong	-4028 May 05 j 17:12	12° Υ 06'46	1°48'13	minimum elong	-4020 May 24 j 11:00	0° ✕ 01'00	1°19'08
max. Earth dist.	-4028 May 05 j 13:45	12° Υ 06'27	30.89866 AU	max. Earth dist.	-4020 May 23 j 23:14	29° Υ 59'54	30.95935 AU
retrograde	-4028 Aug 19 j 00:48	14° Υ 38'16			-4020 May 24 j 00:16	0° ✕	
opposition	-4028 Nov 04 j 14:12	13° Υ 14'17	-1°-54'-4	retrograde	-4020 Sep 05 j 18:13	2° ✕ 31'07	
min. Earth dist.	-4028 Nov 04 j 16:44	13° Υ 14'06	28.90419 AU	opposition	-4020 Nov 22 j 01:18	1° ✕ 07'40	-1°-22'-27
direct	-4027 Jan 22 j 05:13	11° Υ 49'11		min. Earth dist.	-4020 Nov 22 j 12:31	1° ✕ 06'52	28.96321 AU
conjunction	-4027 May 08 j 07:34	14° Υ 21'09	-1°-45'-6	direct	-4019 Jan 07 j 01:56	30° ✕ Υ	
					-4019 Feb 09 j 06:11	29° Υ 42'17	
					-4019 Mar 14 j 05:56	0° ✕	

Attention, astronomical year style is used: The year -4019 in astronomical counting style is the year 4020 BCE in historical counting style.

max. Earth dist.	-4019 May 26 j 11:45	2°8'13"19	30.96608 AU	conjunction	-4011 Jun 14 j 12:24	19°8'59"59	0°-37'-57
				minimum elong	-4011 Jun 14 j 12:24	19°8'59"59	0°37'51
conjunction	-4019 May 27 j 00:46	2°8'14"31	-1°-15'00	max. Earth dist.	-4011 Jun 13 j 17:59	19°8'58"16	31.04945 AU
minimum elong	-4019 May 27 j 00:46	2°8'14"31	1°14'56	retrograde	-4011 Sep 25 j 20:46	22°8'28"44	
retrograde	-4019 Sep 08 j 05:55	4°8'44"26		opposition	-4011 Dec 11 j 22:41	21°8'06"01	0°-37'-57
opposition	-4019 Nov 24 j 11:31	3°8'21"01	-1°-17'-54	min. Earth dist.	-4011 Dec 12 j 16:02	21°8'04"48	29.05433 AU
min. Earth dist.	-4019 Nov 24 j 22:22	3°8'20"15	28.97030 AU	direct	-4010 Mar 01 j 20:20	19°8'40"39	
direct	-4018 Feb 11 j 19:31	1°8'55"35		max. Earth dist.	-4010 Jun 16 j 05:36	22°8'11"17	31.05836 AU
conjunction	-4018 May 29 j 14:25	4°8'27"50	-1°-10'-42	conjunction	-4010 Jun 17 j 01:28	22°8'13"07	0°-33'00
minimum elong	-4018 May 29 j 14:26	4°8'27"50	1°10'36	minimum elong	-4010 Jun 17 j 01:28	22°8'13"08	0°32'53
max. Earth dist.	-4018 May 29 j 00:54	4°8'26"34	30.97370 AU	retrograde	-4010 Sep 28 j 08:01	24°8'41"44	
retrograde	-4018 Sep 10 j 16:28	6°8'57"34		opposition	-4010 Dec 14 j 09:10	23°8'19"05	0°-32'-38
opposition	-4018 Nov 26 j 21:52	5°8'34"12	-1°-13'-15	min. Earth dist.	-4010 Dec 15 j 02:19	23°8'17"52	29.06268 AU
min. Earth dist.	-4018 Nov 27 j 10:08	5°8'33"20	28.97862 AU	direct	-4009 Mar 04 j 09:01	21°8'53"41	
direct	-4017 Feb 14 j 06:57	4°8'08"44					
				conjunction	-4009 Jun 19 j 14:32	24°8'26"09	0°-28'-1
conjunction	-4017 Jun 01 j 04:00	6°8'40"59	-1°-6'-17	minimum elong	-4009 Jun 19 j 14:32	24°8'26"09	0°27'54
minimum elong	-4017 Jun 01 j 04:00	6°8'40"59	1°06'12	max. Earth dist.	-4009 Jun 18 j 18:01	24°8'24"15	31.06631 AU
max. Earth dist.	-4017 May 31 j 14:16	6°8'39"43	30.98282 AU	retrograde	-4009 Sep 30 j 18:12	26°8'54"36	
retrograde	-4017 Sep 13 j 04:30	9°8'10"33		opposition	-4009 Dec 16 j 19:43	25°8'31"59	0°-27'-17
opposition	-4017 Nov 29 j 08:07	7°8'47"15	-1°-8'-28	min. Earth dist.	-4009 Dec 17 j 14:31	25°8'30"40	29.07042 AU
min. Earth dist.	-4017 Nov 29 j 20:05	7°8'46"24	28.98833 AU	direct	-4008 Mar 05 j 20:22	24°8'06"34	
direct	-4016 Feb 16 j 21:07	6°8'21"47		max. Earth dist.	-4008 Jun 20 j 06:28	26°8'37"04	31.07390 AU
conjunction	-4016 Jun 02 j 17:22	8°8'54"04	-1°-1'-46	conjunction	-4008 Jun 21 j 03:22	26°8'39"00	0°-22'-59
minimum elong	-4016 Jun 02 j 17:23	8°8'54"04	1°01'41	minimum elong	-4008 Jun 21 j 03:23	26°8'39"00	0°22'51
max. Earth dist.	-4016 Jun 02 j 02:28	8°8'52"41	30.99326 AU	retrograde	-4008 Oct 02 j 05:38	29°8'07"17	
retrograde	-4016 Sep 14 j 16:25	11°8'23"29		opposition	-4008 Dec 18 j 06:11	27°8'44"43	0°-21'-54
opposition	-4016 Nov 30 j 18:27	10°8'00"17	-1°-3'-36	min. Earth dist.	-4008 Dec 19 j 00:53	27°8'43"24	29.07775 AU
min. Earth dist.	-4016 Dec 01 j 07:22	9°8'59"22	28.99938 AU	direct	-4007 Mar 08 j 11:11	26°8'19"15	
direct	-4015 Feb 18 j 08:49	8°8'34"49					
				conjunction	-4007 Jun 23 j 16:07	28°8'51"40	0°-17'-56
conjunction	-4015 Jun 05 j 06:57	11°8'07"10	0°-57'-9	minimum elong	-4007 Jun 23 j 16:07	28°8'51"40	0°17'48
minimum elong	-4015 Jun 05 j 06:57	11°8'07"10	0°57'04	max. Earth dist.	-4007 Jun 22 j 18:06	28°8'49"38	31.08123 AU
max. Earth dist.	-4015 Jun 04 j 16:16	11°8'05"48	31.00481 AU		-4007 Jul 25 j 09:23	0°II	
retrograde	-4015 Sep 17 j 02:40	13°8'36"26		retrograde	-4007 Oct 04 j 16:54	1°II19"48	
opposition	-4015 Dec 03 j 04:43	12°8'13"21	0°-58'-37		-4007 Dec 19 j 01:16	30°R8	
min. Earth dist.	-4015 Dec 03 j 18:13	12°8'12"24	29.01109 AU	opposition	-4007 Dec 20 j 16:40	29°8'57"15	0°-16'-29
direct	-4014 Feb 20 j 21:55	10°8'47"55		min. Earth dist.	-4007 Dec 21 j 12:14	29°8'55"53	29.08534 AU
				direct	-4006 Mar 10 j 23:34	28°8'31"46	
conjunction	-4014 Jun 07 j 20:21	13°8'20"18	0°-52'-28		-4006 May 27 j 12:43	0°II	
minimum elong	-4014 Jun 07 j 20:21	13°8'20"18	0°52'22	max. Earth dist.	-4006 Jun 25 j 07:16	1°II02"09	31.08909 AU
max. Earth dist.	-4014 Jun 07 j 03:49	13°8'18"46	31.01676 AU				
	-4014 Jul 26 j 13:08	15°8		conjunction	-4006 Jun 26 j 04:47	1°II04"09	0°-12'-52
retrograde	-4014 Sep 19 j 14:40	15°8'49"27		minimum elong	-4006 Jun 26 j 04:47	1°II04"09	0°12'44
	-4014 Nov 15 j 05:24	15°R8		behind sun begin	-4006 Jun 26 j 00:44	1°II03"47	
opposition	-4014 Dec 05 j 15:08	14°8'26"29	0°-53'-34	behind sun end	-4006 Jun 26 j 08:50	1°II04"30	
min. Earth dist.	-4014 Dec 06 j 05:11	14°8'25"29	29.02307 AU	retrograde	-4006 Oct 07 j 02:38	3°II32"07	
direct	-4013 Feb 23 j 09:04	13°8'01"05		opposition	-4006 Dec 23 j 03:18	2°II09"37	0°-11'-3
	-4013 May 26 j 06:07	15°8		min. Earth dist.	-4006 Dec 23 j 23:02	2°II08"14	29.09352 AU
				direct	-4005 Mar 13 j 12:59	0°II44"07	
conjunction	-4013 Jun 10 j 09:41	15°8'33"31	0°-47'-42				
minimum elong	-4013 Jun 10 j 09:42	15°8'33"31	0°47'35	conjunction	-4005 Jun 28 j 17:00	3°II16"28	0°-7'-48
max. Earth dist.	-4013 Jun 09 j 17:29	15°8'32"01	31.02851 AU	minimum elong	-4005 Jun 28 j 17:01	3°II16"28	0°07'40
retrograde	-4013 Sep 22 j 00:34	18°8'02"32		behind sun begin	-4005 Jun 28 j 11:05	3°II15"56	
opposition	-4013 Dec 08 j 01:42	16°8'39"40	0°-48'-25	behind sun end	-4005 Jun 28 j 22:56	3°II16"59	
min. Earth dist.	-4013 Dec 08 j 17:10	16°8'38"35	29.03444 AU	max. Earth dist.	-4005 Jun 27 j 18:13	3°II14"21	31.09778 AU
direct	-4012 Feb 25 j 20:40	15°8'14"18		retrograde	-4005 Oct 09 j 14:29	5°II44"18	
				opposition	-4005 Dec 25 j 13:51	4°II21"51	0°-5'-36
conjunction	-4012 Jun 11 j 22:59	17°8'46"45	0°-42'-51	min. Earth dist.	-4005 Dec 26 j 09:30	4°II20"28	29.10282 AU
minimum elong	-4012 Jun 11 j 22:59	17°8'46"45	0°42'45	direct	-4004 Mar 15 j 01:12	2°II56"21	
max. Earth dist.	-4012 Jun 11 j 04:48	17°8'45"04	31.03954 AU	max. Earth dist.	-4004 Jun 29 j 07:35	5°II26"39	31.10758 AU
retrograde	-4012 Sep 23 j 11:41	20°8'15"39					
opposition	-4012 Dec 09 j 12:02	18°8'52"52	0°-43'-13	conjunction	-4004 Jun 30 j 05:29	5°II28"41	0°-2'-42
min. Earth dist.	-4012 Dec 10 j 03:35	18°8'51"47	29.04497 AU	minimum elong	-4004 Jun 30 j 05:28	5°II28"41	0°02'34
direct	-4011 Feb 27 j 08:19	17°8'27"30		behind sun begin	-4004 Jun 29 j 22:56	5°II28"06	

Planetary Phenomena of Neptune from -4400 through -3900 (UT), Astrodienst AG 7-Dez-2017 14:36, page 26

Attention, astronomical year style is used: The year -4004 in astronomical counting style is the year 4005 BCE in historical counting style.

behind sun end	-4004 Jun 30 j 12:01	5°II29'16		direct	-3996 Apr 02 j 02:32	20°II33'32	
retrograde	-4004 Oct 10 j 23:53	7°II56'24		max. Earth dist.	-3996 Jul 17 j 03:12	23°II03'11	31.18096 AU
opposition	-4004 Dec 27 j 00:23	6°II34'01	0°00'-8				
min. Earth dist.	-4004 Dec 27 j 20:57	6°II32'34	29.11309 AU	conjunction	-3996 Jul 18 j 05:38	23°II05'38	0°37'39
asc. node	-4003 Jan 06 j 08:22	6°II16'49		minimum elong	-3996 Jul 18 j 05:38	23°II05'38	0°37'49
direct	-4003 Mar 17 j 13:32	5°II08'33		retrograde	-3996 Oct 28 j 11:19	25°II32'34	
				opposition	-3995 Jan 13 j 15:07	24°II10'35	0°42'46
conjunction	-4003 Jul 02 j 17:43	7°II40'52	0°02'31	min. Earth dist.	-3995 Jan 14 j 14:39	24°II08'57	29.18402 AU
minimum elong	-4003 Jul 02 j 17:44	7°II40'52	0°02'41	direct	-3995 Apr 04 j 15:19	22°II45'13	
behind sun begin	-4003 Jul 02 j 11:12	7°II40'17					
behind sun end	-4003 Jul 03 j 00:15	7°II41'27		conjunction	-3995 Jul 20 j 17:16	25°II17'15	0°42'30
max. Earth dist.	-4003 Jul 01 j 18:35	7°II38'43	31.11838 AU	minimum elong	-3995 Jul 20 j 17:16	25°II17'15	0°42'41
retrograde	-4003 Oct 13 j 10:23	10°II08'28		max. Earth dist.	-3995 Jul 19 j 15:46	25°II14'53	31.18605 AU
opposition	-4003 Dec 29 j 10:58	8°II46'10	0°05'18	retrograde	-3995 Oct 30 j 20:28	27°II44'05	
min. Earth dist.	-4003 Dec 30 j 06:58	8°II44'47	29.12421 AU	opposition	-3994 Jan 16 j 02:14	26°II22'06	0°47'55
direct	-4002 Mar 20 j 01:20	7°II20'45		min. Earth dist.	-3994 Jan 17 j 02:38	26°II20'24	29.18900 AU
max. Earth dist.	-4002 Jul 04 j 07:23	9°II50'58	31.12961 AU	direct	-3994 Apr 07 j 04:36	24°II56'43	
				max. Earth dist.	-3994 Jul 22 j 02:00	27°II26'13	31.19108 AU
conjunction	-4002 Jul 05 j 05:57	9°II53'04	0°07'37				
minimum elong	-4002 Jul 05 j 05:56	9°II53'04	0°07'46	conjunction	-3994 Jul 23 j 04:24	27°II28'40	0°47'17
behind sun begin	-4002 Jul 05 j 00:03	9°II52'32		minimum elong	-3994 Jul 23 j 04:24	27°II28'40	0°47'27
behind sun end	-4002 Jul 05 j 11:50	9°II53'35		retrograde	-3994 Nov 02 j 06:40	29°II55'24	
retrograde	-4002 Oct 15 j 19:02	12°II20'35		opposition	-3993 Jan 18 j 13:13	28°II33'25	0°52'59
opposition	-4002 Dec 31 j 21:48	10°II58'22	0°10'45	min. Earth dist.	-3993 Jan 19 j 12:38	28°II31'48	29.19428 AU
min. Earth dist.	-4001 Jan 01 j 19:08	10°II56'53	29.13551 AU	direct	-3993 Apr 09 j 16:54	27°II08'02	
direct	-4001 Mar 22 j 12:22	9°II32'59					
				conjunction	-3993 Jul 25 j 15:38	29°II39'56	0°51'59
conjunction	-4001 Jul 07 j 18:02	12°II05'17	0°12'41	minimum elong	-3993 Jul 25 j 15:37	29°II39'56	0°52'09
minimum elong	-4001 Jul 07 j 18:02	12°II05'17	0°12'51	max. Earth dist.	-3993 Jul 24 j 14:14	29°II37'34	31.19656 AU
behind sun begin	-4001 Jul 07 j 14:03	12°II04'56			-3993 Aug 03 j 15:11	0°☾	
behind sun end	-4001 Jul 07 j 22:02	12°II05'39		retrograde	-3993 Nov 04 j 14:59	2°☾06'35	
max. Earth dist.	-4001 Jul 06 j 18:29	12°II03'06	31.14083 AU	opposition	-3992 Jan 21 j 00:15	0°☾44'37	0°57'58
retrograde	-4001 Oct 18 j 06:07	14°II32'43		min. Earth dist.	-3992 Jan 22 j 00:30	0°☾42'57	29.20030 AU
opposition	-4000 Jan 03 j 08:26	13°II10'35	0°16'11		-3992 Feb 18 j 08:38	30°R II	
min. Earth dist.	-4000 Jan 04 j 05:19	13°II09'08	29.14644 AU	direct	-3992 Apr 11 j 04:11	29°II19'14	
direct	-4000 Mar 23 j 23:50	11°II45'14			-3992 Jun 01 j 09:34	0°☾	
max. Earth dist.	-4000 Jul 08 j 06:14	14°II15'18	31.15124 AU	max. Earth dist.	-3992 Jul 26 j 00:56	1°☾48'40	31.20309 AU
conjunction	-4000 Jul 09 j 06:11	14°II17'32	0°17'45	conjunction	-3992 Jul 27 j 02:40	1°☾51'04	0°56'37
minimum elong	-4000 Jul 09 j 06:11	14°II17'32	0°17'55	minimum elong	-3992 Jul 27 j 02:39	1°☾51'04	0°56'47
retrograde	-4000 Oct 19 j 15:52	16°II44'53		retrograde	-3992 Nov 06 j 01:24	4°☾17'40	
opposition	-3999 Jan 04 j 19:24	15°II22'48	0°21'35	opposition	-3991 Jan 22 j 11:17	2°☾55'45	1°02'52
min. Earth dist.	-3999 Jan 05 j 17:46	15°II21'15	29.15642 AU	min. Earth dist.	-3991 Jan 23 j 10:18	2°☾54'09	29.20731 AU
direct	-3999 Mar 26 j 11:06	13°II57'28		direct	-3991 Apr 13 j 15:34	1°☾30'23	
conjunction	-3999 Jul 11 j 18:16	16°II29'44	0°22'47	conjunction	-3991 Jul 29 j 13:39	4°☾02'12	1°01'09
minimum elong	-3999 Jul 11 j 18:16	16°II29'44	0°22'58	minimum elong	-3991 Jul 29 j 13:39	4°☾02'12	1°01'20
max. Earth dist.	-3999 Jul 10 j 17:58	16°II27'28	31.16057 AU	max. Earth dist.	-3991 Jul 28 j 12:19	3°☾59'50	31.21052 AU
retrograde	-3999 Oct 22 j 02:32	18°II56'59		retrograde	-3991 Nov 08 j 10:47	6°☾28'46	
opposition	-3998 Jan 07 j 06:17	17°II34'57	0°26'58	opposition	-3990 Jan 24 j 22:29	5°☾06'53	1°07'41
min. Earth dist.	-3998 Jan 08 j 04:33	17°II33'24	29.16503 AU	min. Earth dist.	-3990 Jan 25 j 22:13	5°☾05'15	29.21532 AU
direct	-3998 Mar 29 j 01:06	16°II09'37		direct	-3990 Apr 16 j 02:20	3°☾41'36	
max. Earth dist.	-3998 Jul 13 j 04:50	18°II39'29	31.16850 AU	max. Earth dist.	-3990 Jul 30 j 23:48	6°☾11'03	31.21891 AU
conjunction	-3998 Jul 14 j 06:14	18°II41'51	0°27'48	conjunction	-3990 Aug 01 j 00:35	6°☾13'22	1°05'37
minimum elong	-3998 Jul 14 j 06:14	18°II41'51	0°27'57	minimum elong	-3990 Aug 01 j 00:35	6°☾13'22	1°05'47
retrograde	-3998 Oct 24 j 13:47	21°II09'00		retrograde	-3990 Nov 10 j 21:12	8°☾39'56	
opposition	-3997 Jan 09 j 17:20	19°II46'59	0°32'17	opposition	-3989 Jan 27 j 09:41	7°☾18'06	1°12'24
min. Earth dist.	-3997 Jan 10 j 16:24	19°II45'24	29.17246 AU	min. Earth dist.	-3989 Jan 28 j 08:40	7°☾16'31	29.22387 AU
direct	-3997 Mar 31 j 12:47	18°II21'39		direct	-3989 Apr 18 j 14:53	5°☾52'53	
				max. Earth dist.	-3989 Aug 02 j 10:06	8°☾22'16	31.22748 AU
conjunction	-3997 Jul 16 j 18:01	20°II53'50	0°32'45	conjunction	-3989 Aug 03 j 11:17	8°☾24'37	1°09'58
minimum elong	-3997 Jul 16 j 18:00	20°II53'50	0°32'55	minimum elong	-3989 Aug 03 j 11:17	8°☾24'37	1°10'09
max. Earth dist.	-3997 Jul 15 j 17:01	20°II51'30	31.17527 AU	retrograde	-3989 Nov 13 j 08:33	10°☾51'11	
retrograde	-3997 Oct 26 j 23:34	23°II20'52		opposition	-3988 Jan 29 j 20:58	9°☾29'24	1°17'00
opposition	-3996 Jan 12 j 04:20	21°II58'53	0°37'34	min. Earth dist.	-3988 Jan 30 j 20:14	9°☾27'49	29.23250 AU
min. Earth dist.	-3996 Jan 13 j 03:48	21°II57'15	29.17861 AU				

Attention, astronomical year style is used: The year -3988 in astronomical counting style is the year 3989 BCE in historical counting style.

direct	-3988 Apr 20 j 01:06	8° \mathring{U} 04'15		conjunction	-3980 Aug 22 j 09:13	28° \mathring{U} 04'21	1°43'55
				minimum elong	-3980 Aug 22 j 09:13	28° \mathring{U} 04'21	1°44'03
conjunction	-3988 Aug 04 j 22:11	10° \mathring{S} 35'58	1°14'14		-3980 Oct 20 j 09:27	0° \mathring{N}	
minimum elong	-3988 Aug 04 j 22:10	10° \mathring{S} 35'58	1°14'24	retrograde	-3980 Dec 02 j 03:20	0° \mathring{N} 30'42	
max. Earth dist.	-3988 Aug 03 j 21:51	10° \mathring{S} 33'41	31.23577 AU		-3979 Jan 15 j 11:18	30° \mathring{R} \mathring{S}	
retrograde	-3988 Nov 14 j 18:38	13° \mathring{S} 02'31		opposition	-3979 Feb 18 j 05:03	29° \mathring{S} 08'51	1°52'39
opposition	-3987 Jan 31 j 08:17	11° \mathring{S} 40'48	1°21'30	min. Earth dist.	-3979 Feb 19 j 02:52	29° \mathring{S} 07'22	29.27216 AU
min. Earth dist.	-3987 Feb 01 j 07:43	11° \mathring{S} 39'11	29.24038 AU	direct	-3979 May 10 j 14:57	27° \mathring{S} 43'51	
direct	-3987 Apr 22 j 14:18	10° \mathring{S} 15'41			-3979 Aug 18 j 05:43	0° \mathring{N}	
max. Earth dist.	-3987 Aug 06 j 07:28	12° \mathring{S} 44'59	31.24315 AU				
				conjunction	-3979 Aug 24 j 19:11	0° \mathring{N} 14'45	1°47'00
conjunction	-3987 Aug 07 j 08:54	12° \mathring{S} 47'22	1°18'23	minimum elong	-3979 Aug 24 j 19:10	0° \mathring{N} 14'45	1°47'09
minimum elong	-3987 Aug 07 j 08:54	12° \mathring{S} 47'22	1°18'33	max. Earth dist.	-3979 Aug 23 j 21:18	0° \mathring{N} 12'42	31.27310 AU
retrograde	-3987 Nov 17 j 07:22	15° \mathring{S} 13'54		retrograde	-3979 Dec 04 j 13:06	2° \mathring{N} 41'07	
opposition	-3986 Feb 02 j 19:47	13° \mathring{S} 52'12	1°25'52	opposition	-3978 Feb 20 j 16:54	1° \mathring{N} 19'16	1°55'52
min. Earth dist.	-3986 Feb 03 j 18:54	13° \mathring{S} 50'38	29.24735 AU	min. Earth dist.	-3978 Feb 21 j 14:04	1° \mathring{N} 17'50	29.27687 AU
direct	-3986 Apr 25 j 03:04	12° \mathring{S} 27'09			-3978 Apr 24 j 04:40	30° \mathring{R} \mathring{S}	
				direct	-3978 May 13 j 03:55	29° \mathring{S} 54'20	
conjunction	-3986 Aug 09 j 19:35	14° \mathring{S} 58'46	1°22'25		-3978 May 31 j 22:37	0° \mathring{N}	
minimum elong	-3986 Aug 09 j 19:35	14° \mathring{S} 58'46	1°22'35	max. Earth dist.	-3978 Aug 26 j 06:35	2° \mathring{N} 23'05	31.27829 AU
max. Earth dist.	-3986 Aug 08 j 19:14	14° \mathring{S} 56'29	31.24939 AU				
retrograde	-3986 Nov 19 j 16:54	17° \mathring{S} 25'17		conjunction	-3978 Aug 27 j 04:48	2° \mathring{N} 25'10	1°49'56
opposition	-3985 Feb 05 j 07:27	16° \mathring{S} 03'36	1°30'07	minimum elong	-3978 Aug 27 j 04:47	2° \mathring{N} 25'10	1°50'04
min. Earth dist.	-3985 Feb 06 j 07:22	16° \mathring{S} 01'58	29.25298 AU	retrograde	-3978 Dec 07 j 01:39	4° \mathring{N} 51'35	
direct	-3985 Apr 27 j 16:15	14° \mathring{S} 38'35		opposition	-3977 Feb 23 j 04:43	3° \mathring{N} 29'45	1°58'54
max. Earth dist.	-3985 Aug 11 j 04:49	17° \mathring{S} 07'44	31.25436 AU	min. Earth dist.	-3977 Feb 24 j 00:49	3° \mathring{N} 28'23	29.28250 AU
				direct	-3977 May 15 j 15:15	2° \mathring{N} 04'53	
conjunction	-3985 Aug 12 j 06:09	17° \mathring{S} 10'06	1°26'20				
minimum elong	-3985 Aug 12 j 06:08	17° \mathring{S} 10'06	1°26'30	conjunction	-3977 Aug 29 j 14:40	4° \mathring{N} 35'40	1°52'42
retrograde	-3985 Nov 22 j 03:33	19° \mathring{S} 36'36		minimum elong	-3977 Aug 29 j 14:40	4° \mathring{N} 35'39	1°52'51
opposition	-3984 Feb 07 j 18:49	18° \mathring{S} 14'55	1°34'14	max. Earth dist.	-3977 Aug 28 j 18:09	4° \mathring{N} 33'44	31.28405 AU
min. Earth dist.	-3984 Feb 08 j 17:52	18° \mathring{S} 13'20	29.25739 AU	retrograde	-3977 Dec 09 j 11:29	7° \mathring{N} 02'08	
direct	-3984 Apr 29 j 04:46	16° \mathring{S} 49'53		opposition	-3976 Feb 25 j 16:33	5° \mathring{N} 40'20	2°01'47
				min. Earth dist.	-3976 Feb 26 j 13:01	5° \mathring{N} 38'56	29.28833 AU
conjunction	-3984 Aug 13 j 16:47	19° \mathring{S} 21'20	1°30'08	direct	-3976 May 17 j 03:20	4° \mathring{N} 15'34	
minimum elong	-3984 Aug 13 j 16:47	19° \mathring{S} 21'20	1°30'17	max. Earth dist.	-3976 Aug 30 j 03:29	6° \mathring{N} 44'19	31.28982 AU
max. Earth dist.	-3984 Aug 12 j 16:12	19° \mathring{S} 19'02	31.25806 AU				
retrograde	-3984 Nov 23 j 12:28	21° \mathring{S} 47'47		conjunction	-3976 Aug 31 j 00:23	6° \mathring{N} 46'17	1°55'18
opposition	-3983 Feb 09 j 06:30	20° \mathring{S} 26'04	1°38'13	minimum elong	-3976 Aug 31 j 00:23	6° \mathring{N} 46'17	1°55'27
min. Earth dist.	-3983 Feb 10 j 06:31	20° \mathring{S} 24'26	29.26063 AU	retrograde	-3976 Dec 10 j 23:03	9° \mathring{N} 12'50	
direct	-3983 May 01 j 17:15	19° \mathring{S} 01'03		opposition	-3975 Feb 27 j 04:31	7° \mathring{N} 51'03	2°04'29
max. Earth dist.	-3983 Aug 15 j 02:14	21° \mathring{S} 30'04	31.26088 AU	min. Earth dist.	-3975 Feb 27 j 23:38	7° \mathring{N} 49'46	29.29390 AU
				direct	-3975 May 19 j 15:29	6° \mathring{N} 26'23	
conjunction	-3983 Aug 16 j 03:03	21° \mathring{S} 32'23	1°33'47				
minimum elong	-3983 Aug 16 j 03:03	21° \mathring{S} 32'23	1°33'57	conjunction	-3975 Sep 02 j 10:08	8° \mathring{N} 57'03	1°57'45
retrograde	-3983 Nov 25 j 22:40	23° \mathring{S} 58'47		minimum elong	-3975 Sep 02 j 10:08	8° \mathring{N} 57'03	1°57'54
opposition	-3982 Feb 11 j 18:06	22° \mathring{S} 37'03	1°42'03	max. Earth dist.	-3975 Sep 01 j 14:22	8° \mathring{N} 55'11	31.29489 AU
min. Earth dist.	-3982 Feb 12 j 16:54	22° \mathring{S} 35'29	29.26313 AU	retrograde	-3975 Dec 13 j 09:04	11° \mathring{N} 23'40	
direct	-3982 May 04 j 05:58	21° \mathring{S} 12'01		opposition	-3974 Mar 01 j 16:49	10° \mathring{N} 01'55	2°07'01
				min. Earth dist.	-3974 Mar 02 j 12:34	10° \mathring{N} 00'34	29.29860 AU
conjunction	-3982 Aug 18 j 13:18	23° \mathring{S} 43'14	1°37'18	direct	-3974 May 22 j 03:46	8° \mathring{N} 37'19	
minimum elong	-3982 Aug 18 j 13:18	23° \mathring{S} 43'14	1°37'28				
max. Earth dist.	-3982 Aug 17 j 12:54	23° \mathring{S} 40'57	31.26317 AU	conjunction	-3974 Sep 04 j 19:51	11° \mathring{N} 07'55	2°00'02
retrograde	-3982 Nov 28 j 07:21	26° \mathring{S} 09'36		minimum elong	-3974 Sep 04 j 19:51	11° \mathring{N} 07'55	2°00'09
opposition	-3981 Feb 14 j 05:47	24° \mathring{S} 47'49	1°45'44	max. Earth dist.	-3974 Sep 04 j 00:06	11° \mathring{N} 06'04	31.29904 AU
min. Earth dist.	-3981 Feb 15 j 05:07	24° \mathring{S} 46'13	29.26560 AU	retrograde	-3974 Dec 15 j 19:59	13° \mathring{N} 34'36	
direct	-3981 May 06 j 16:53	23° \mathring{S} 22'47		opposition	-3973 Mar 04 j 04:56	12° \mathring{N} 12'52	2°09'21
				min. Earth dist.	-3973 Mar 04 j 23:22	12° \mathring{N} 11'37	29.30210 AU
conjunction	-3981 Aug 20 j 23:17	25° \mathring{S} 53'52	1°40'41	direct	-3973 May 24 j 16:18	10° \mathring{N} 48'20	
minimum elong	-3981 Aug 20 j 23:17	25° \mathring{S} 53'52	1°40'51	max. Earth dist.	-3973 Sep 06 j 10:01	13° \mathring{N} 17'02	31.30173 AU
max. Earth dist.	-3981 Aug 19 j 23:49	25° \mathring{S} 51'40	31.26574 AU				
retrograde	-3981 Nov 30 j 16:28	28° \mathring{S} 20'13		conjunction	-3973 Sep 07 j 05:33	13° \mathring{N} 18'52	2°02'08
opposition	-3980 Feb 16 j 17:25	26° \mathring{S} 58'24	1°49'16	minimum elong	-3973 Sep 07 j 05:33	13° \mathring{N} 18'52	2°02'16
min. Earth dist.	-3980 Feb 17 j 15:37	26° \mathring{S} 56'53	29.26839 AU		-3973 Oct 26 j 12:29	15° \mathring{N}	
direct	-3980 May 08 j 05:13	25° \mathring{S} 33'22		retrograde	-3973 Dec 18 j 05:27	15° \mathring{N} 45'38	
max. Earth dist.	-3980 Aug 21 j 09:44	28° \mathring{S} 02'09	31.26886 AU		-3972 Feb 11 j 16:46	15° \mathring{R} \mathring{N}	
				opposition	-3972 Mar 05 j 17:16	14° \mathring{N} 23'52	2°11'30

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Attention, astronomical year style is used: The year -3972 in astronomical counting style is the year 3973 BCE in historical counting style.

min. Earth dist.	-3972 Mar 06 j 12:18	14° Ω 22'35	29.30415 AU	opposition	-3964 Mar 23 j 20:17	1° \mp 49'26	2°21'48
direct	-3972 May 26 j 03:08	12° Ω 59'24		min. Earth dist.	-3964 Mar 24 j 08:28	1° \mp 48'36	29.30052 AU
	-3972 Aug 26 j 08:15	15° Ω		direct	-3964 Jun 13 j 02:12	0° \mp 25'16	
conjunction	-3972 Sep 08 j 15:15	15° Ω 29'50	2°04'04	conjunction	-3964 Sep 25 j 17:21	2° \mp 54'51	2°12'57
minimum elong	-3972 Sep 08 j 15:15	15° Ω 29'50	2°04'11	minimum elong	-3964 Sep 25 j 17:21	2° \mp 54'52	2°13'01
max. Earth dist.	-3972 Sep 07 j 20:31	15° Ω 28'04	31.30299 AU	max. Earth dist.	-3964 Sep 25 j 04:33	2° \mp 53'39	31.29926 AU
retrograde	-3972 Dec 19 j 14:47	17° Ω 56'39		retrograde	-3963 Jan 06 j 05:26	5° \mp 22'17	
opposition	-3971 Mar 08 j 05:31	16° Ω 34'52	2°13'29	opposition	-3963 Mar 26 j 08:56	4° \mp 00'08	2°22'11
min. Earth dist.	-3971 Mar 08 j 23:38	16° Ω 33'38	29.30460 AU	min. Earth dist.	-3963 Mar 26 j 21:13	3° \mp 59'18	29.30134 AU
direct	-3971 May 28 j 15:19	15° Ω 10'26		direct	-3963 Jun 15 j 12:52	2° \mp 36'04	
max. Earth dist.	-3971 Sep 10 j 05:46	17° Ω 38'57	31.30279 AU				
conjunction	-3971 Sep 11 j 00:49	17° Ω 40'45	2°05'49	conjunction	-3963 Sep 28 j 02:33	5° \mp 05'34	2°13'12
minimum elong	-3971 Sep 11 j 00:49	17° Ω 40'45	2°05'57	minimum elong	-3963 Sep 28 j 02:33	5° \mp 05'34	2°13'17
retrograde	-3971 Dec 22 j 02:06	20° Ω 07'37		max. Earth dist.	-3963 Sep 27 j 15:09	5° \mp 04'29	31.29991 AU
opposition	-3970 Mar 10 j 17:56	18° Ω 45'47	2°15'15	retrograde	-3962 Jan 08 j 15:06	7° \mp 33'06	
min. Earth dist.	-3970 Mar 11 j 11:48	18° Ω 44'34	29.30397 AU	opposition	-3962 Mar 28 j 21:38	6° \mp 10'56	2°22'21
direct	-3970 May 31 j 00:57	17° Ω 21'22		min. Earth dist.	-3962 Mar 29 j 08:39	6° \mp 10'12	29.30158 AU
				direct	-3962 Jun 18 j 01:17	4° \mp 46'57	
conjunction	-3970 Sep 13 j 10:15	19° Ω 51'34	2°07'23	conjunction	-3962 Sep 30 j 11:34	7° \mp 16'21	2°13'16
minimum elong	-3970 Sep 13 j 10:15	19° Ω 51'34	2°07'30	minimum elong	-3962 Sep 30 j 11:35	7° \mp 16'21	2°13'20
max. Earth dist.	-3970 Sep 12 j 16:47	19° Ω 49'55	31.30165 AU	max. Earth dist.	-3962 Sep 30 j 00:03	7° \mp 15'16	31.29971 AU
retrograde	-3970 Dec 24 j 11:48	22° Ω 18'30		retrograde	-3961 Jan 11 j 02:59	9° \mp 44'02	
opposition	-3969 Mar 13 j 06:19	20° Ω 56'35	2°16'50	opposition	-3961 Mar 31 j 10:25	8° \mp 21'50	2°22'20
min. Earth dist.	-3969 Mar 13 j 23:40	20° Ω 55'25	29.30244 AU	min. Earth dist.	-3961 Mar 31 j 21:03	8° \mp 21'07	29.30091 AU
direct	-3969 Jun 02 j 14:11	19° Ω 32'11		direct	-3961 Jun 20 j 11:04	6° \mp 57'54	
conjunction	-3969 Sep 15 j 19:32	22° Ω 02'15	2°08'47	conjunction	-3961 Oct 02 j 20:53	9° \mp 27'13	2°13'09
minimum elong	-3969 Sep 15 j 19:32	22° Ω 02'15	2°08'54	minimum elong	-3961 Oct 02 j 20:53	9° \mp 27'13	2°13'13
max. Earth dist.	-3969 Sep 15 j 01:42	22° Ω 00'34	31.30000 AU	max. Earth dist.	-3961 Oct 02 j 10:53	9° \mp 26'17	31.29832 AU
retrograde	-3969 Dec 27 j 00:18	24° Ω 29'14		retrograde	-3960 Jan 13 j 12:45	11° \mp 55'01	
opposition	-3968 Mar 14 j 18:28	23° Ω 07'15	2°18'14	opposition	-3960 Apr 01 j 23:08	10° \mp 32'47	2°22'06
min. Earth dist.	-3968 Mar 15 j 10:40	23° Ω 06'09	29.30087 AU	min. Earth dist.	-3960 Apr 02 j 09:19	10° \mp 32'05	29.29872 AU
direct	-3968 Jun 04 j 01:05	21° Ω 42'51		direct	-3960 Jun 21 j 23:33	9° \mp 08'55	
conjunction	-3968 Sep 17 j 04:54	24° Ω 12'49	2°09'59	conjunction	-3960 Oct 04 j 06:03	11° \mp 38'08	2°12'50
minimum elong	-3968 Sep 17 j 04:54	24° Ω 12'49	2°10'05	minimum elong	-3960 Oct 04 j 06:04	11° \mp 38'08	2°12'53
max. Earth dist.	-3968 Sep 16 j 12:59	24° Ω 11'19	31.29848 AU	max. Earth dist.	-3960 Oct 03 j 19:32	11° \mp 37'08	31.29547 AU
retrograde	-3968 Dec 28 j 09:59	26° Ω 39'51		retrograde	-3959 Jan 15 j 01:30	14° \mp 06'02	
opposition	-3967 Mar 17 j 06:59	25° Ω 17'48	2°19'26	opposition	-3959 Apr 04 j 12:02	12° \mp 43'44	2°21'40
min. Earth dist.	-3967 Mar 17 j 23:02	25° Ω 16'43	29.29964 AU	min. Earth dist.	-3959 Apr 04 j 21:07	12° \mp 43'07	29.29513 AU
direct	-3967 Jun 06 j 12:43	23° Ω 53'27		direct	-3959 Jun 24 j 09:44	11° \mp 19'54	
conjunction	-3967 Sep 19 j 13:57	26° Ω 23'17	2°11'01	conjunction	-3959 Oct 06 j 15:15	13° \mp 49'01	2°12'20
minimum elong	-3967 Sep 19 j 13:57	26° Ω 23'17	2°11'07	minimum elong	-3959 Oct 06 j 15:15	13° \mp 49'01	2°12'24
max. Earth dist.	-3967 Sep 18 j 22:16	26° Ω 21'49	31.29768 AU	max. Earth dist.	-3959 Oct 06 j 06:19	13° \mp 48'10	31.29108 AU
retrograde	-3967 Dec 30 j 21:48	28° Ω 50'24		retrograde	-3958 Jan 17 j 11:44	16° \mp 17'02	
opposition	-3966 Mar 19 j 19:24	27° Ω 28'19	2°20'25	opposition	-3958 Apr 07 j 01:04	14° \mp 54'39	2°21'02
min. Earth dist.	-3966 Mar 20 j 09:25	27° Ω 27'22	29.29927 AU	min. Earth dist.	-3958 Apr 07 j 10:18	14° \mp 54'02	29.29000 AU
direct	-3966 Jun 09 j 01:13	26° Ω 04'00		direct	-3958 Jun 26 j 21:15	13° \mp 30'51	
conjunction	-3966 Sep 21 j 23:11	28° Ω 33'45	2°11'51	conjunction	-3958 Oct 09 j 00:21	15° \mp 59'50	2°11'39
minimum elong	-3966 Sep 21 j 23:11	28° Ω 33'45	2°11'56	minimum elong	-3958 Oct 09 j 00:21	15° \mp 59'50	2°11'42
max. Earth dist.	-3966 Sep 21 j 09:02	28° Ω 32'25	31.29766 AU	max. Earth dist.	-3958 Oct 08 j 15:27	15° \mp 59'00	31.28547 AU
	-3966 Nov 01 j 14:48	0° \mp		retrograde	-3957 Jan 20 j 00:07	18° \mp 27'57	
retrograde	-3965 Jan 02 j 08:38	1° \mp 00'57		opposition	-3957 Apr 09 j 13:45	17° \mp 05'28	2°20'12
	-3965 Mar 09 j 02:51	30° \mathbb{R} Ω		min. Earth dist.	-3957 Apr 09 j 21:19	17° \mp 04'58	29.28387 AU
opposition	-3965 Mar 22 j 07:52	29° Ω 38'50	2°21'13	direct	-3957 Jun 29 j 09:32	15° \mp 41'41	
min. Earth dist.	-3965 Mar 22 j 21:57	29° Ω 37'53	29.29970 AU				
direct	-3965 Jun 11 j 13:35	28° Ω 14'36		conjunction	-3957 Oct 11 j 09:25	18° \mp 10'33	2°10'47
	-3965 Sep 04 j 11:53	0° \mp		minimum elong	-3957 Oct 11 j 09:25	18° \mp 10'33	2°10'50
conjunction	-3965 Sep 24 j 08:18	0° \mp 44'16	2°12'29	max. Earth dist.	-3957 Oct 11 j 01:43	18° \mp 09'50	31.27894 AU
minimum elong	-3965 Sep 24 j 08:17	0° \mp 44'16	2°12'35	retrograde	-3956 Jan 22 j 11:27	20° \mp 38'47	
max. Earth dist.	-3965 Sep 23 j 18:51	0° \mp 43'00	31.29844 AU	opposition	-3956 Apr 11 j 02:42	19° \mp 16'12	2°19'10
retrograde	-3964 Jan 04 j 19:42	3° \mp 11'34		min. Earth dist.	-3956 Apr 11 j 10:23	19° \mp 15'40	29.27717 AU
				direct	-3956 Jun 30 j 21:51	17° \mp 52'25	

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Attention, astronomical year style is used: The year -3956 in astronomical counting style is the year 3957 BCE in historical counting style.

conjunction	-3956 Oct 12 j 18:17	20° \mathring{M} 21'10	2°09'43	conjunction	-3948 Oct 29 j 18:10	7° \mathring{A} 48'14	1°54'41
minimum elong	-3956 Oct 12 j 18:17	20° \mathring{M} 21'10	2°09'45	minimum elong	-3948 Oct 29 j 18:10	7° \mathring{A} 48'14	1°54'40
max. Earth dist.	-3956 Oct 12 j 11:37	20° \mathring{M} 20'32	31.27232 AU	max. Earth dist.	-3948 Oct 29 j 19:25	7° \mathring{A} 48'21	31.23639 AU
retrograde	-3955 Jan 23 j 22:32	22° \mathring{M} 49'30		retrograde	-3947 Feb 10 j 17:57	10° \mathring{A} 17'50	
opposition	-3955 Apr 13 j 15:30	21° \mathring{M} 26'50	2°17'56	opposition	-3947 May 01 j 23:17	8° \mathring{A} 54'46	2°01'07
min. Earth dist.	-3955 Apr 13 j 21:00	21° \mathring{M} 26'27	29.27063 AU	min. Earth dist.	-3947 May 01 j 21:59	8° \mathring{A} 54'52	29.23447 AU
direct	-3955 Jul 03 j 10:39	20° \mathring{M} 03'04		direct	-3947 Jul 21 j 02:16	7° \mathring{A} 31'33	
conjunction	-3955 Oct 15 j 03:11	22° \mathring{M} 31'43	2°08'29	conjunction	-3947 Nov 01 j 03:26	9° \mathring{A} 59'38	1°52'01
minimum elong	-3955 Oct 15 j 03:11	22° \mathring{M} 31'43	2°08'31	minimum elong	-3947 Nov 01 j 03:26	9° \mathring{A} 59'38	1°52'01
max. Earth dist.	-3955 Oct 14 j 21:16	22° \mathring{M} 31'10	31.26610 AU	max. Earth dist.	-3947 Nov 01 j 05:29	9° \mathring{A} 59'49	31.22985 AU
retrograde	-3954 Jan 26 j 08:44	25° \mathring{M} 00'11		retrograde	-3946 Feb 13 j 05:54	12° \mathring{A} 29'22	
opposition	-3954 Apr 16 j 04:27	23° \mathring{M} 37'26	2°16'31	opposition	-3946 May 04 j 12:20	11° \mathring{A} 06'14	1°58'11
min. Earth dist.	-3954 Apr 16 j 09:38	23° \mathring{M} 37'05	29.26493 AU	min. Earth dist.	-3946 May 04 j 09:15	11° \mathring{A} 06'26	29.22715 AU
direct	-3954 Jul 05 j 21:35	22° \mathring{M} 13'43		direct	-3946 Jul 23 j 14:32	9° \mathring{A} 43'02	
conjunction	-3954 Oct 17 j 12:05	24° \mathring{M} 42'16	2°07'03	conjunction	-3946 Nov 03 j 12:37	12° \mathring{A} 11'01	1°49'12
minimum elong	-3954 Oct 17 j 12:06	24° \mathring{M} 42'16	2°07'04	minimum elong	-3946 Nov 03 j 12:37	12° \mathring{A} 11'01	1°49'10
max. Earth dist.	-3954 Oct 17 j 08:07	24° \mathring{M} 41'54	31.26091 AU	max. Earth dist.	-3946 Nov 03 j 14:49	12° \mathring{A} 11'13	31.22193 AU
retrograde	-3953 Jan 28 j 18:26	27° \mathring{M} 10'52		retrograde	-3945 Feb 15 j 17:23	14° \mathring{A} 40'53	
opposition	-3953 Apr 18 j 17:16	25° \mathring{M} 48'04	2°14'54	opposition	-3945 May 07 j 01:32	13° \mathring{A} 17'38	1°55'06
min. Earth dist.	-3953 Apr 18 j 20:38	25° \mathring{M} 47'50	29.26005 AU	min. Earth dist.	-3945 May 06 j 22:37	13° \mathring{A} 17'50	29.21866 AU
direct	-3953 Jul 08 j 10:13	24° \mathring{M} 24'25		direct	-3945 Jul 26 j 02:11	11° \mathring{A} 54'27	
conjunction	-3953 Oct 19 j 20:56	26° \mathring{M} 52'54	2°05'26	conjunction	-3945 Nov 05 j 21:53	14° \mathring{A} 22'19	1°46'14
minimum elong	-3953 Oct 19 j 20:57	26° \mathring{M} 52'54	2°05'27	minimum elong	-3945 Nov 05 j 21:53	14° \mathring{A} 22'19	1°46'12
max. Earth dist.	-3953 Oct 19 j 17:09	26° \mathring{M} 52'32	31.25653 AU	max. Earth dist.	-3945 Nov 06 j 01:44	14° \mathring{A} 22'41	31.21305 AU
retrograde	-3952 Jan 31 j 06:30	29° \mathring{M} 21'39		retrograde	-3944 Feb 18 j 04:04	16° \mathring{A} 52'17	
opposition	-3952 Apr 20 j 06:03	27° \mathring{M} 58'48	2°13'04	opposition	-3944 May 08 j 14:28	15° \mathring{A} 28'56	1°51'50
min. Earth dist.	-3952 Apr 20 j 08:34	27° \mathring{M} 58'38	29.25609 AU	min. Earth dist.	-3944 May 08 j 10:08	15° \mathring{A} 29'14	29.20934 AU
direct	-3952 Jul 09 j 19:54	26° \mathring{M} 35'14		direct	-3944 Jul 27 j 15:48	14° \mathring{A} 05'44	
conjunction	-3952 Oct 21 j 05:58	29° \mathring{M} 03'39	2°03'38	conjunction	-3944 Nov 07 j 06:58	16° \mathring{A} 33'30	1°43'06
minimum elong	-3952 Oct 21 j 05:58	29° \mathring{M} 03'39	2°03'39	minimum elong	-3944 Nov 07 j 06:59	16° \mathring{A} 33'30	1°43'03
max. Earth dist.	-3952 Oct 21 j 04:18	29° \mathring{M} 03'29	31.25289 AU	max. Earth dist.	-3944 Nov 07 j 10:50	16° \mathring{A} 33'52	31.20373 AU
retrograde	-3952 Nov 15 j 16:00	0° \mathring{A}		retrograde	-3943 Feb 19 j 16:06	19° \mathring{A} 03'36	
opposition	-3951 Feb 01 j 16:15	1° \mathring{A} 32'35		opposition	-3943 May 11 j 03:38	17° \mathring{A} 40'07	1°48'25
min. Earth dist.	-3951 Apr 22 j 19:02	0° \mathring{A} 09'42	2°11'03	min. Earth dist.	-3943 May 10 j 22:31	17° \mathring{A} 40'28	29.20012 AU
direct	-3951 Apr 22 j 20:32	0° \mathring{A} 09'36	29.25252 AU	direct	-3943 Jul 30 j 02:16	16° \mathring{A} 16'56	
conjunction	-3951 Apr 28 j 19:06	30° \mathring{R} \mathring{M}		conjunction	-3943 Nov 09 j 16:09	18° \mathring{A} 44'35	1°39'50
direct	-3951 Jul 12 j 07:45	28° \mathring{M} 46'13		minimum elong	-3943 Nov 09 j 16:09	18° \mathring{A} 44'35	1°39'47
	-3951 Sep 19 j 05:19	0° \mathring{A}		max. Earth dist.	-3943 Nov 09 j 22:10	18° \mathring{A} 45'09	31.19471 AU
conjunction	-3951 Oct 23 j 14:46	1° \mathring{A} 14'33	2°01'40	retrograde	-3942 Feb 22 j 01:25	21° \mathring{A} 14'48	
minimum elong	-3951 Oct 23 j 14:46	1° \mathring{A} 14'34	2°01'41	opposition	-3942 May 13 j 16:42	19° \mathring{A} 51'14	1°44'50
max. Earth dist.	-3951 Oct 23 j 13:07	1° \mathring{A} 14'24	31.24955 AU	min. Earth dist.	-3942 May 13 j 10:28	19° \mathring{A} 51'39	29.19135 AU
retrograde	-3950 Feb 04 j 05:11	3° \mathring{A} 43'40		direct	-3942 Aug 01 j 14:36	18° \mathring{A} 28'04	
opposition	-3950 Apr 25 j 08:03	2° \mathring{A} 20'46	2°08'51	conjunction	-3942 Nov 12 j 01:19	20° \mathring{A} 55'37	1°36'25
min. Earth dist.	-3950 Apr 25 j 08:08	2° \mathring{A} 20'45	29.24914 AU	minimum elong	-3942 Nov 12 j 01:20	20° \mathring{A} 55'37	1°36'21
direct	-3950 Jul 14 j 16:52	0° \mathring{A} 57'21		max. Earth dist.	-3942 Nov 12 j 07:28	20° \mathring{A} 56'12	31.18650 AU
conjunction	-3950 Oct 25 j 23:55	3° \mathring{A} 25'39	1°59'31	retrograde	-3941 Feb 24 j 13:48	23° \mathring{A} 25'59	
minimum elong	-3950 Oct 25 j 23:56	3° \mathring{A} 25'39	1°59'30	opposition	-3941 May 16 j 05:32	22° \mathring{A} 02'20	1°41'06
max. Earth dist.	-3950 Oct 26 j 00:03	3° \mathring{A} 25'39	31.24595 AU	min. Earth dist.	-3941 May 15 j 21:43	22° \mathring{A} 02'52	29.18363 AU
retrograde	-3949 Feb 06 j 15:54	5° \mathring{A} 54'56		direct	-3941 Aug 04 j 00:09	20° \mathring{A} 39'11	
opposition	-3949 Apr 27 j 21:00	4° \mathring{A} 31'59	2°06'27	conjunction	-3941 Nov 14 j 10:38	23° \mathring{A} 06'41	1°32'51
min. Earth dist.	-3949 Apr 27 j 21:07	4° \mathring{A} 31'59	29.24523 AU	minimum elong	-3941 Nov 14 j 10:39	23° \mathring{A} 06'41	1°32'48
direct	-3949 Jul 17 j 03:12	3° \mathring{A} 08'40		max. Earth dist.	-3941 Nov 14 j 18:41	23° \mathring{A} 07'27	31.17924 AU
conjunction	-3949 Oct 28 j 09:01	5° \mathring{A} 36'53	1°57'11	retrograde	-3940 Feb 27 j 00:35	25° \mathring{A} 37'13	
minimum elong	-3949 Oct 28 j 09:01	5° \mathring{A} 36'53	1°57'11	opposition	-3940 May 17 j 18:36	24° \mathring{A} 13'30	1°37'14
max. Earth dist.	-3949 Oct 28 j 09:21	5° \mathring{A} 36'55	31.24177 AU	min. Earth dist.	-3940 May 17 j 10:24	24° \mathring{A} 14'04	29.17678 AU
retrograde	-3948 Feb 09 j 05:20	8° \mathring{A} 06'20		direct	-3940 Aug 05 j 10:44	22° \mathring{A} 50'25	
opposition	-3948 Apr 29 j 10:01	6° \mathring{A} 43'20	2°03'53	conjunction	-3940 Nov 15 j 19:47	25° \mathring{A} 17'51	1°29'09
min. Earth dist.	-3948 Apr 29 j 08:26	6° \mathring{A} 43'27	29.24048 AU	minimum elong	-3940 Nov 15 j 19:47	25° \mathring{A} 17'51	1°29'05
direct	-3948 Jul 18 j 14:54	5° \mathring{A} 20'04		max. Earth dist.	-3940 Nov 16 j 04:34	25° \mathring{A} 18'41	31.17299 AU

Attention, astronomical year style is used: The year -3939 in astronomical counting style is the year 3940 BCE in historical counting style.

retrograde	-3939 Feb 28 j 13:59	27° 4 48'34		minimum elong	-3932 Dec 03 j 01:32	12° ℳ 53'40	0°55'06
opposition	-3939 May 20 j 07:38	26° 4 24'49	1°33'12	max. Earth dist.	-3932 Dec 03 j 16:20	12° ℳ 55'04	31.11131 AU
min. Earth dist.	-3939 May 19 j 21:23	26° 4 25'31	29.17082 AU		-3931 Feb 06 j 17:23	15° ℳ	
direct	-3939 Aug 07 j 21:29	25° 4 01'48		retrograde	-3931 Mar 18 j 16:00	15° ℳ 25'43	
					-3931 Apr 29 j 00:15	15° ℳ	
conjunction	-3939 Nov 18 j 05:09	27° 4 29'13	1°25'19	opposition	-3931 Jun 07 j 16:26	14° ℳ 01'30	0°56'29
minimum elong	-3939 Nov 18 j 05:10	27° 4 29'13	1°25'15	min. Earth dist.	-3931 Jun 07 j 01:47	14° ℳ 02'30	29.10600 AU
max. Earth dist.	-3939 Nov 18 j 15:03	27° 4 30'09	31.16729 AU	direct	-3931 Aug 25 j 15:55	12° ℳ 38'45	
	-3938 Feb 28 j 11:48	0° ℳ			-3931 Dec 02 j 21:23	15° ℳ	
retrograde	-3938 Mar 03 j 02:52	0° ℳ 00'07					
	-3938 Mar 05 j 17:52	30° ℳ		conjunction	-3931 Dec 05 j 11:31	15° ℳ 05'53	0°50'33
opposition	-3938 May 22 j 20:44	28° 4 36'20	1°29'02	minimum elong	-3931 Dec 05 j 11:31	15° ℳ 05'53	0°50'27
min. Earth dist.	-3938 May 22 j 10:35	28° 4 37'01	29.16530 AU	max. Earth dist.	-3931 Dec 06 j 02:51	15° ℳ 07'20	31.10011 AU
direct	-3938 Aug 10 j 07:34	27° 4 13'23		retrograde	-3930 Mar 21 j 04:40	17° ℳ 38'03	
				opposition	-3930 Jun 10 j 05:14	16° ℳ 13'44	0°51'26
conjunction	-3938 Nov 20 j 14:39	29° 4 40'46	1°21'21	min. Earth dist.	-3930 Jun 09 j 12:55	16° ℳ 14'51	29.09494 AU
minimum elong	-3938 Nov 20 j 14:39	29° 4 40'47	1°21'16		-3930 Aug 04 j 15:42	15° ℳ	
max. Earth dist.	-3938 Nov 21 j 01:42	29° 4 41'49	31.16193 AU	direct	-3930 Aug 28 j 02:40	14° ℳ 50'58	
	-3938 Nov 29 j 01:47	0° ℳ			-3930 Sep 20 j 02:56	15° ℳ	
retrograde	-3937 Mar 05 j 15:43	2° ℳ 11'52					
opposition	-3937 May 25 j 09:44	0° ℳ 48'04	1°24'43	conjunction	-3930 Dec 07 j 21:31	17° ℳ 18'04	0°45'48
min. Earth dist.	-3937 May 24 j 21:43	0° ℳ 48'52	29.15970 AU	minimum elong	-3930 Dec 07 j 21:31	17° ℳ 18'04	0°45'41
	-3937 Jun 25 j 21:45	30° ℳ		max. Earth dist.	-3930 Dec 08 j 13:40	17° ℳ 19'36	31.08926 AU
direct	-3937 Aug 12 j 19:05	29° 4 25'11		retrograde	-3929 Mar 23 j 16:45	19° ℳ 50'21	
	-3937 Sep 27 j 16:53	0° ℳ		opposition	-3929 Jun 12 j 18:11	18° ℳ 25'57	0°46'20
				min. Earth dist.	-3929 Jun 12 j 02:00	18° ℳ 27'03	29.08453 AU
conjunction	-3937 Nov 23 j 00:08	1° ℳ 52'34	1°17'15	direct	-3929 Aug 30 j 12:13	17° ℳ 03'10	
minimum elong	-3937 Nov 23 j 00:08	1° ℳ 52'34	1°17'10				
max. Earth dist.	-3937 Nov 23 j 11:19	1° ℳ 53'38	31.15610 AU	conjunction	-3929 Dec 10 j 07:33	19° ℳ 30'14	0°40'59
retrograde	-3936 Mar 07 j 04:42	4° ℳ 23'51		minimum elong	-3929 Dec 10 j 07:33	19° ℳ 30'14	0°40'52
opposition	-3936 May 26 j 22:53	3° ℳ 00'01	1°20'17	max. Earth dist.	-3929 Dec 11 j 01:01	19° ℳ 31'53	31.07937 AU
min. Earth dist.	-3936 May 26 j 11:07	3° ℳ 00'49	29.15358 AU	retrograde	-3928 Mar 25 j 05:37	22° ℳ 02'39	
direct	-3936 Aug 14 j 06:05	1° ℳ 37'13		opposition	-3928 Jun 14 j 06:58	20° ℳ 38'11	0°41'09
				min. Earth dist.	-3928 Jun 13 j 12:46	20° ℳ 39'25	29.07507 AU
conjunction	-3936 Nov 24 j 09:58	4° ℳ 04'35	1°13'03	direct	-3928 Aug 31 j 23:35	19° ℳ 15'24	
minimum elong	-3936 Nov 24 j 09:58	4° ℳ 04'35	1°12'57				
max. Earth dist.	-3936 Nov 24 j 22:44	4° ℳ 05'48	31.14960 AU	conjunction	-3928 Dec 11 j 17:37	21° ℳ 42'28	0°36'07
retrograde	-3935 Mar 09 j 17:19	6° ℳ 36'03		minimum elong	-3928 Dec 11 j 17:38	21° ℳ 42'28	0°35'59
opposition	-3935 May 29 j 12:02	5° ℳ 12'10	1°15'44	max. Earth dist.	-3928 Dec 12 j 11:17	21° ℳ 44'08	31.07044 AU
min. Earth dist.	-3935 May 28 j 23:02	5° ℳ 13'03	29.14643 AU	retrograde	-3927 Mar 27 j 19:23	24° ℳ 15'02	
direct	-3935 Aug 16 j 19:19	3° ℳ 49'25		opposition	-3927 Jun 16 j 19:56	22° ℳ 50'29	0°35'54
				min. Earth dist.	-3927 Jun 16 j 01:45	22° ℳ 51'44	29.06669 AU
conjunction	-3935 Nov 26 j 19:41	6° ℳ 16'46	1°08'44	direct	-3927 Sep 03 j 10:24	21° ℳ 27'44	
minimum elong	-3935 Nov 26 j 19:41	6° ℳ 16'46	1°08'39				
max. Earth dist.	-3935 Nov 27 j 07:59	6° ℳ 17'56	31.14190 AU	conjunction	-3927 Dec 14 j 03:55	23° ℳ 54'47	0°31'10
retrograde	-3934 Mar 12 j 06:22	8° ℳ 48'24		minimum elong	-3927 Dec 14 j 03:55	23° ℳ 54'48	0°31'03
opposition	-3934 Jun 01 j 01:17	7° ℳ 24'28	1°11'04	max. Earth dist.	-3927 Dec 14 j 23:26	23° ℳ 56'38	31.06252 AU
min. Earth dist.	-3934 May 31 j 12:06	7° ℳ 25'22	29.13807 AU	retrograde	-3926 Mar 30 j 08:46	26° ℳ 27'30	
direct	-3934 Aug 19 j 05:43	6° ℳ 01'45		opposition	-3926 Jun 19 j 08:44	25° ℳ 02'55	0°30'35
				min. Earth dist.	-3926 Jun 18 j 13:11	25° ℳ 04'15	29.05900 AU
conjunction	-3934 Nov 29 j 05:46	8° ℳ 29'03	1°04'19	direct	-3926 Sep 05 j 23:09	23° ℳ 40'11	
minimum elong	-3934 Nov 29 j 05:46	8° ℳ 29'04	1°04'13				
max. Earth dist.	-3934 Nov 29 j 19:30	8° ℳ 30'22	31.13281 AU	conjunction	-3926 Dec 16 j 14:14	26° ℳ 07'16	0°26'11
retrograde	-3933 Mar 14 j 16:23	11° ℳ 00'50		minimum elong	-3926 Dec 16 j 14:14	26° ℳ 07'16	0°26'02
opposition	-3933 Jun 03 j 14:15	9° ℳ 36'50	1°06'18	max. Earth dist.	-3926 Dec 17 j 09:25	26° ℳ 09'04	31.05513 AU
min. Earth dist.	-3933 Jun 03 j 00:37	9° ℳ 37'46	29.12819 AU	retrograde	-3925 Apr 01 j 22:02	28° ℳ 40'08	
direct	-3933 Aug 21 j 18:19	8° ℳ 14'07		opposition	-3925 Jun 21 j 21:29	27° ℳ 15'31	0°25'13
				min. Earth dist.	-3925 Jun 21 j 01:46	27° ℳ 16'52	29.05181 AU
conjunction	-3933 Dec 01 j 15:40	10° ℳ 41'23	0°59'49	direct	-3925 Sep 08 j 09:04	25° ℳ 52'49	
minimum elong	-3933 Dec 01 j 15:40	10° ℳ 41'23	0°59'43				
max. Earth dist.	-3933 Dec 02 j 05:01	10° ℳ 42'39	31.12249 AU	conjunction	-3925 Dec 19 j 00:49	28° ℳ 19'54	0°21'09
retrograde	-3932 Mar 16 j 05:17	13° ℳ 13'17		minimum elong	-3925 Dec 19 j 00:49	28° ℳ 19'54	0°21'01
opposition	-3932 Jun 05 j 03:19	11° ℳ 49'11	1°01'26	max. Earth dist.	-3925 Dec 19 j 21:37	28° ℳ 21'52	31.04793 AU
min. Earth dist.	-3932 Jun 04 j 12:41	11° ℳ 50'11	29.11737 AU		-3924 Feb 05 j 01:16	0° ℳ	
direct	-3932 Aug 23 j 04:38	10° ℳ 26'28		retrograde	-3924 Apr 03 j 09:45	0° ℳ 52'55	
					-3924 Jun 03 j 14:40	30° ℳ	
conjunction	-3932 Dec 03 j 01:31	12° ℳ 53'40	0°55'13	opposition	-3924 Jun 23 j 10:21	29° ℳ 28'17	0°19'49

Attention, astronomical year style is used: The year -3924 in astronomical counting style is the year 3925 BCE in historical counting style.

min. Earth dist.	-3924 Jun 22 j 14:06	29° \mathbb{L} 29'40	29.04447 AU	behind sun begin	-3917 Jan 03 j 02:55	13° \mathbb{Z} 51'08	
direct	-3924 Sep 09 j 21:45	28° \mathbb{L} 05'37		behind sun end	-3917 Jan 03 j 08:07	13° \mathbb{Z} 51'36	
	-3924 Dec 05 j 23:12	0° \mathbb{Z}		max. Earth dist.	-3917 Jan 04 j 04:54	13° \mathbb{Z} 53'34	30.97735 AU
				retrograde	-3917 Apr 20 j 04:07	16° \mathbb{Z} 25'11	
conjunction	-3924 Dec 20 j 11:19	0° \mathbb{Z} 32'44	0°16'05	min. Earth dist.	-3917 Jul 09 j 04:36	15° \mathbb{Z} 01'38	28.97219 AU
minimum elong	-3924 Dec 20 j 11:19	0° \mathbb{Z} 32'44	0°15'56	opposition	-3917 Jul 10 j 03:17	15° \mathbb{Z} 00'05	0°-18'-25
behind sun begin	-3924 Dec 20 j 10:12	0° \mathbb{Z} 32'38		direct	-3917 Sep 26 j 03:25	13° \mathbb{Z} 37'14	
behind sun end	-3924 Dec 20 j 12:25	0° \mathbb{Z} 32'50					
max. Earth dist.	-3924 Dec 21 j 07:43	0° \mathbb{Z} 34'40	31.04049 AU	conjunction	-3916 Jan 05 j 16:37	16° \mathbb{Z} 04'27	0°-19'-43
retrograde	-3923 Apr 06 j 00:02	3° \mathbb{Z} 05'54		minimum elong	-3916 Jan 05 j 16:37	16° \mathbb{Z} 04'27	0°19'53
opposition	-3923 Jun 25 j 23:16	1° \mathbb{Z} 41'14	0°14'23	max. Earth dist.	-3916 Jan 06 j 15:33	16° \mathbb{Z} 06'37	30.96679 AU
min. Earth dist.	-3923 Jun 25 j 02:18	1° \mathbb{Z} 42'40	29.03672 AU	retrograde	-3916 Apr 21 j 17:40	18° \mathbb{Z} 38'22	
direct	-3923 Sep 12 j 08:29	0° \mathbb{Z} 18'35		opposition	-3916 Jul 11 j 15:47	17° \mathbb{Z} 13'12	0°-23'-50
				min. Earth dist.	-3916 Jul 10 j 16:57	17° \mathbb{Z} 14'47	28.96234 AU
conjunction	-3923 Dec 22 j 22:14	2° \mathbb{Z} 45'43	0°11'00	direct	-3916 Sep 27 j 13:19	15° \mathbb{Z} 50'20	
minimum elong	-3923 Dec 22 j 22:14	2° \mathbb{Z} 45'43	0°10'52				
behind sun begin	-3923 Dec 22 j 17:18	2° \mathbb{Z} 45'16		conjunction	-3915 Jan 07 j 03:54	18° \mathbb{Z} 17'36	0°-24'-46
behind sun end	-3923 Dec 23 j 03:10	2° \mathbb{Z} 46'10		minimum elong	-3915 Jan 07 j 03:54	18° \mathbb{Z} 17'36	0°24'57
max. Earth dist.	-3923 Dec 23 j 19:36	2° \mathbb{Z} 47'44	31.03217 AU	max. Earth dist.	-3915 Jan 08 j 04:29	18° \mathbb{Z} 19'55	30.95749 AU
retrograde	-3922 Apr 08 j 11:16	5° \mathbb{Z} 19'02		retrograde	-3915 Apr 24 j 06:21	20° \mathbb{Z} 51'37	
opposition	-3922 Jun 28 j 12:04	3° \mathbb{Z} 54'19	0°08'55	min. Earth dist.	-3915 Jul 13 j 04:45	19° \mathbb{Z} 28'02	28.95369 AU
min. Earth dist.	-3922 Jun 27 j 15:36	3° \mathbb{Z} 55'43	29.02788 AU	opposition	-3915 Jul 14 j 04:10	19° \mathbb{Z} 26'25	0°-29'-13
direct	-3922 Sep 14 j 19:43	2° \mathbb{Z} 31'40		direct	-3915 Sep 30 j 02:16	18° \mathbb{Z} 03'32	
conjunction	-3922 Dec 25 j 09:14	4° \mathbb{Z} 58'50	0°05'54	conjunction	-3914 Jan 09 j 15:17	20° \mathbb{Z} 30'51	0°-29'-47
minimum elong	-3922 Dec 25 j 09:14	4° \mathbb{Z} 58'49	0°05'45	minimum elong	-3914 Jan 09 j 15:17	20° \mathbb{Z} 30'51	0°29'57
behind sun begin	-3922 Dec 25 j 03:04	4° \mathbb{Z} 58'16		max. Earth dist.	-3914 Jan 10 j 15:29	20° \mathbb{Z} 33'09	30.94956 AU
behind sun end	-3922 Dec 25 j 15:24	4° \mathbb{Z} 59'23		retrograde	-3914 Apr 26 j 21:18	23° \mathbb{Z} 04'59	
max. Earth dist.	-3922 Dec 26 j 06:30	5° \mathbb{Z} 00'50	31.02282 AU	opposition	-3914 Jul 16 j 16:23	21° \mathbb{Z} 39'45	0°-34'-34
retrograde	-3921 Apr 11 j 00:15	7° \mathbb{Z} 32'16		min. Earth dist.	-3914 Jul 15 j 16:12	21° \mathbb{Z} 41'26	28.94644 AU
min. Earth dist.	-3921 Jun 30 j 03:21	6° \mathbb{Z} 08'58	29.01786 AU	direct	-3914 Oct 02 j 13:12	20° \mathbb{Z} 16'53	
opposition	-3921 Jul 01 j 00:50	6° \mathbb{Z} 07'29	0°03'26				
direct	-3921 Sep 17 j 06:36	4° \mathbb{Z} 44'49		conjunction	-3913 Jan 12 j 02:52	22° \mathbb{Z} 44'16	0°-34'-46
				minimum elong	-3913 Jan 12 j 02:52	22° \mathbb{Z} 44'16	0°34'57
conjunction	-3921 Dec 27 j 20:07	7° \mathbb{Z} 11'59	0°00'44	max. Earth dist.	-3913 Jan 13 j 04:10	22° \mathbb{Z} 46'40	30.94272 AU
minimum elong	-3921 Dec 27 j 20:08	7° \mathbb{Z} 11'59	0°00'36	retrograde	-3913 Apr 29 j 08:35	25° \mathbb{Z} 18'31	
behind sun begin	-3921 Dec 27 j 13:43	7° \mathbb{Z} 11'25		min. Earth dist.	-3913 Jul 18 j 04:53	23° \mathbb{Z} 54'56	28.94010 AU
behind sun end	-3921 Dec 28 j 02:34	7° \mathbb{Z} 12'34		opposition	-3913 Jul 19 j 04:45	23° \mathbb{Z} 53'17	0°-39'-52
max. Earth dist.	-3921 Dec 28 j 17:33	7° \mathbb{Z} 14'00	31.01212 AU	direct	-3913 Oct 05 j 00:20	22° \mathbb{Z} 30'26	
desc. node	-3920 Feb 17 j 02:21	8° \mathbb{Z} 57'33					
retrograde	-3920 Apr 12 j 12:12	9° \mathbb{Z} 45'32		conjunction	-3912 Jan 14 j 14:24	24° \mathbb{Z} 57'53	0°-39'-42
opposition	-3920 Jul 02 j 13:43	8° \mathbb{Z} 20'41	0°-2'-2	minimum elong	-3912 Jan 14 j 14:23	24° \mathbb{Z} 57'53	0°39'52
min. Earth dist.	-3920 Jul 01 j 17:01	8° \mathbb{Z} 22'07	29.00669 AU	max. Earth dist.	-3912 Jan 15 j 15:52	25° \mathbb{Z} 00'17	30.93684 AU
direct	-3920 Sep 18 j 16:24	6° \mathbb{Z} 57'59		retrograde	-3912 Apr 30 j 21:46	27° \mathbb{Z} 32'14	
				opposition	-3912 Jul 20 j 17:03	26° \mathbb{Z} 07'01	0°-45'-7
conjunction	-3920 Dec 29 j 07:16	9° \mathbb{Z} 25'09	0°-4'-28	min. Earth dist.	-3912 Jul 19 j 16:08	26° \mathbb{Z} 08'45	28.93451 AU
minimum elong	-3920 Dec 29 j 07:15	9° \mathbb{Z} 25'09	0°04'39	direct	-3912 Oct 06 j 11:05	24° \mathbb{Z} 44'10	
behind sun begin	-3920 Dec 29 j 00:57	9° \mathbb{Z} 24'35					
behind sun end	-3920 Dec 29 j 13:34	9° \mathbb{Z} 25'43		conjunction	-3911 Jan 16 j 02:13	27° \mathbb{Z} 11'43	0°-44'-35
max. Earth dist.	-3920 Dec 30 j 05:25	9° \mathbb{Z} 27'14	31.00066 AU	minimum elong	-3911 Jan 16 j 02:13	27° \mathbb{Z} 11'43	0°44'46
retrograde	-3919 Apr 15 j 01:22	11° \mathbb{Z} 58'47		max. Earth dist.	-3911 Jan 17 j 03:48	27° \mathbb{Z} 14'08	30.93128 AU
min. Earth dist.	-3919 Jul 04 j 04:15	10° \mathbb{Z} 35'22	28.99495 AU	retrograde	-3911 May 03 j 10:24	29° \mathbb{Z} 46'11	
opposition	-3919 Jul 05 j 02:19	10° \mathbb{Z} 33'51	0°-7'-30	min. Earth dist.	-3911 Jul 22 j 05:31	28° \mathbb{Z} 22'37	28.92906 AU
direct	-3919 Sep 21 j 04:03	9° \mathbb{Z} 11'06		opposition	-3911 Jul 23 j 05:25	28° \mathbb{Z} 20'58	0°-50'-18
				direct	-3911 Oct 08 j 20:16	26° \mathbb{Z} 58'07	
conjunction	-3919 Dec 31 j 18:16	11° \mathbb{Z} 38'16	0°-9'-33				
minimum elong	-3919 Dec 31 j 18:16	11° \mathbb{Z} 38'16	0°09'44	conjunction	-3910 Jan 18 j 14:21	29° \mathbb{Z} 25'45	0°-49'-24
behind sun begin	-3919 Dec 31 j 12:57	11° \mathbb{Z} 37'47		minimum elong	-3910 Jan 18 j 14:21	29° \mathbb{Z} 25'45	0°49'34
behind sun end	-3919 Dec 31 j 23:35	11° \mathbb{Z} 38'45		max. Earth dist.	-3910 Jan 19 j 16:21	29° \mathbb{Z} 28'12	30.92569 AU
max. Earth dist.	-3918 Jan 01 j 16:07	11° \mathbb{Z} 40'20	30.98882 AU		-3910 Feb 02 j 19:43	0° \mathbb{Z}	
retrograde	-3918 Apr 17 j 14:57	14° \mathbb{Z} 12'00		retrograde	-3910 May 05 j 23:36	2° \mathbb{Z} 00'19	
opposition	-3918 Jul 07 j 14:59	12° \mathbb{Z} 46'59	0°-12'-58	opposition	-3910 Jul 25 j 17:39	0° \mathbb{Z} 35'05	0°-55'-25
min. Earth dist.	-3918 Jul 06 j 17:27	12° \mathbb{Z} 48'27	28.98328 AU	min. Earth dist.	-3910 Jul 24 j 16:51	0° \mathbb{Z} 36'49	28.92316 AU
direct	-3918 Sep 23 j 14:51	11° \mathbb{Z} 24'11			-3910 Aug 16 j 11:24	30° \mathbb{R} \mathbb{Z}	
				direct	-3910 Oct 11 j 07:49	29° \mathbb{Z} 12'14	
conjunction	-3917 Jan 03 j 05:32	13° \mathbb{Z} 51'22	0°-14'-39		-3910 Dec 03 j 20:10	0° \mathbb{Z}	
minimum elong	-3917 Jan 03 j 05:31	13° \mathbb{Z} 51'22	0°14'50				

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Attention, astronomical year style is used: The year -3909 in astronomical counting style is the year 3910 BCE in historical counting style.

conjunction	-3909 Jan 21 j 02:30	1° $\overline{39}$ '56	0°-54'-8	retrograde	-3901 May 26 j 22:53	22° $\overline{30}$ '05	
minimum elong	-3909 Jan 21 j 02:29	1° $\overline{39}$ '56	0°54'20	min. Earth dist.	-3901 Aug 14 j 05:35	20° $\overline{34}$ '16	28.86112 AU
max. Earth dist.	-3909 Jan 22 j 03:32	1° $\overline{42}$ '18	30.91927 AU	opposition	-3901 Aug 15 j 05:42	20° $\overline{42}$ '34	-1°-36'-51
retrograde	-3909 May 08 j 12:37	4° $\overline{14}$ '35		direct	-3901 Oct 31 j 14:13	19° $\overline{19}$ '16	
min. Earth dist.	-3909 Jul 27 j 06:18	2° $\overline{50}$ '59	28.91639 AU				
opposition	-3909 Jul 28 j 05:59	2° $\overline{49}$ '20	-1°00'-27	conjunction	-3900 Feb 10 j 19:40	21° $\overline{47}$ '35	-1°-32'-24
direct	-3909 Oct 13 j 17:58	1° $\overline{26}$ '27		minimum elong	-3900 Feb 10 j 19:40	21° $\overline{47}$ '35	1°32'34
				max. Earth dist.	-3900 Feb 11 j 20:39	21° $\overline{49}$ '56	30.85871 AU
conjunction	-3908 Jan 23 j 14:55	3° $\overline{54}$ '13	0°-58'-48	retrograde	-3900 May 28 j 11:32	24° $\overline{22}$ '29	
minimum elong	-3908 Jan 23 j 14:54	3° $\overline{54}$ '13	0°58'59	opposition	-3900 Aug 16 j 17:31	22° $\overline{57}$ '01	-1°-40'-49
max. Earth dist.	-3908 Jan 24 j 16:45	3° $\overline{56}$ '39	30.91197 AU	min. Earth dist.	-3900 Aug 15 j 18:27	22° $\overline{58}$ '38	28.85871 AU
retrograde	-3908 May 10 j 01:44	6° $\overline{28}$ '55		direct	-3900 Nov 01 j 23:38	21° $\overline{33}$ '42	
opposition	-3908 Jul 29 j 18:13	5° $\overline{03}$ '38	-1°-5'-24				
min. Earth dist.	-3908 Jul 28 j 18:03	5° $\overline{05}$ '19	28.90858 AU				
direct	-3908 Oct 15 j 06:02	3° $\overline{40}$ '41					
conjunction	-3907 Jan 25 j 03:09	6° $\overline{08}$ '30	-1°-3'-23				
minimum elong	-3907 Jan 25 j 03:09	6° $\overline{08}$ '30	1°03'34				
max. Earth dist.	-3907 Jan 26 j 03:47	6° $\overline{10}$ '49	30.90376 AU				
retrograde	-3907 May 12 j 15:54	8° $\overline{43}$ '14					
min. Earth dist.	-3907 Jul 31 j 07:00	7° $\overline{19}$ '31	28.90011 AU				
opposition	-3907 Aug 01 j 06:30	7° $\overline{17}$ '53	-1°-10'-14				
direct	-3907 Oct 17 j 16:26	5° $\overline{54}$ '52					
conjunction	-3906 Jan 27 j 15:44	8° $\overline{22}$ '43	-1°-7'-52				
minimum elong	-3906 Jan 27 j 15:44	8° $\overline{22}$ '43	1°08'02				
max. Earth dist.	-3906 Jan 28 j 17:17	8° $\overline{25}$ '08	30.89499 AU				
retrograde	-3906 May 15 j 05:03	10° $\overline{57}$ '27					
opposition	-3906 Aug 03 j 18:25	9° $\overline{32}$ '03	-1°-14'-59				
min. Earth dist.	-3906 Aug 02 j 19:00	9° $\overline{33}$ '41	28.89131 AU				
direct	-3906 Oct 20 j 05:49	8° $\overline{08}$ '57					
conjunction	-3905 Jan 30 j 04:11	10° $\overline{36}$ '51	-1°-12'-15				
minimum elong	-3905 Jan 30 j 04:11	10° $\overline{36}$ '51	1°12'26				
max. Earth dist.	-3905 Jan 31 j 04:47	10° $\overline{39}$ '11	30.88635 AU				
retrograde	-3905 May 17 j 19:42	13° $\overline{11}$ '36					
min. Earth dist.	-3905 Aug 05 j 06:42	11° $\overline{47}$ '47	28.88303 AU				
opposition	-3905 Aug 06 j 06:25	11° $\overline{46}$ '08	-1°-19'-36				
direct	-3905 Oct 22 j 17:26	10° $\overline{22}$ '57					
conjunction	-3904 Feb 01 j 16:36	12° $\overline{50}$ '55	-1°-16'-31				
minimum elong	-3904 Feb 01 j 16:36	12° $\overline{50}$ '55	1°16'41				
max. Earth dist.	-3904 Feb 02 j 18:03	12° $\overline{53}$ '19	30.87830 AU				
retrograde	-3904 May 19 j 07:26	15° $\overline{25}$ '41					
opposition	-3904 Aug 07 j 18:24	14° $\overline{00}$ '10	-1°-24'-7				
min. Earth dist.	-3904 Aug 06 j 19:11	14° $\overline{01}$ '48	28.87557 AU				
direct	-3904 Oct 24 j 05:11	12° $\overline{36}$ '57					
conjunction	-3903 Feb 03 j 05:16	15° $\overline{04}$ '58	-1°-20'-41				
minimum elong	-3903 Feb 03 j 05:15	15° $\overline{04}$ '58	1°20'51				
max. Earth dist.	-3903 Feb 04 j 06:33	15° $\overline{07}$ '21	30.87147 AU				
retrograde	-3903 May 21 j 21:33	17° $\overline{39}$ '44					
min. Earth dist.	-3903 Aug 09 j 06:06	16° $\overline{15}$ '53	28.86946 AU				
opposition	-3903 Aug 10 j 06:08	16° $\overline{14}$ '12	-1°-28'-30				
direct	-3903 Oct 26 j 16:43	14° $\overline{50}$ '56					
conjunction	-3902 Feb 05 j 18:00	17° $\overline{19}$ '03	-1°-24'-43				
minimum elong	-3902 Feb 05 j 17:59	17° $\overline{19}$ '03	1°24'53				
max. Earth dist.	-3902 Feb 06 j 19:18	17° $\overline{21}$ '26	30.86588 AU				
retrograde	-3902 May 24 j 10:09	19° $\overline{53}$ '52					
opposition	-3902 Aug 12 j 18:02	18° $\overline{28}$ '19	-1°-32'-45				
min. Earth dist.	-3902 Aug 11 j 18:57	18° $\overline{29}$ '56	28.86465 AU				
direct	-3902 Oct 29 j 02:37	17° $\overline{05}$ '01					
conjunction	-3901 Feb 08 j 06:49	19° $\overline{33}$ '14	-1°-28'-37				
minimum elong	-3901 Feb 08 j 06:48	19° $\overline{33}$ '14	1°28'49				
max. Earth dist.	-3901 Feb 09 j 08:34	19° $\overline{35}$ '39	30.86172 AU				

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Attention, astronomical year style is used: The year -3900 in astronomical counting style is the year 3901 BCE in historical counting style.

conjunction	-3900 Feb 10 j 19:40	21° $\overline{3}$ 47'35	-1°-32'-24	direct	-3893 Nov 18 j 09:47	7° \approx 18'46	
minimum elong	-3900 Feb 10 j 19:40	21° $\overline{3}$ 47'35	1°32'34				
max. Earth dist.	-3900 Feb 11 j 20:39	21° $\overline{3}$ 49'56	30.85871 AU	conjunction	-3892 Feb 29 j 08:11	9° \approx 47'58	-1°-57'-12
retrograde	-3900 May 28 j 11:32	24° $\overline{3}$ 22'29		minimum elong	-3892 Feb 29 j 08:11	9° \approx 47'57	1°57'20
opposition	-3900 Aug 16 j 17:31	22° $\overline{3}$ 57'01	-1°-40'-49	max. Earth dist.	-3892 Mar 01 j 05:35	9° \approx 49'58	30.83013 AU
min. Earth dist.	-3900 Aug 15 j 18:27	22° $\overline{3}$ 58'38	28.85871 AU	retrograde	-3892 Jun 16 j 00:26	12° \approx 22'47	
direct	-3900 Nov 01 j 23:38	21° $\overline{3}$ 33'42		opposition	-3892 Sep 03 j 14:16	10° \approx 57'23	-2°-6'-37
				min. Earth dist.	-3892 Sep 02 j 18:50	10° \approx 58'46	28.82932 AU
conjunction	-3899 Feb 12 j 08:49	24° $\overline{3}$ 02'09	-1°-36'-3	direct	-3892 Nov 19 j 22:15	9° \approx 33'40	
minimum elong	-3899 Feb 12 j 08:49	24° $\overline{3}$ 02'09	1°36'14				
max. Earth dist.	-3899 Feb 13 j 10:39	24° $\overline{3}$ 04'35	30.85662 AU	conjunction	-3891 Mar 02 j 21:56	12° \approx 02'56	-1°-59'-32
retrograde	-3899 May 31 j 00:42	26° $\overline{3}$ 37'07		minimum elong	-3891 Mar 02 j 21:56	12° \approx 02'56	1°59'41
min. Earth dist.	-3899 Aug 18 j 05:47	25° $\overline{3}$ 13'20	28.85679 AU	max. Earth dist.	-3891 Mar 03 j 18:14	12° \approx 04'50	30.82580 AU
opposition	-3899 Aug 19 j 05:11	25° $\overline{3}$ 11'41	-1°-44'-38	retrograde	-3891 Jun 18 j 12:41	14° \approx 37'42	
direct	-3899 Nov 04 j 10:58	23° $\overline{3}$ 48'22		min. Earth dist.	-3891 Sep 05 j 07:30	13° \approx 13'34	28.82560 AU
				opposition	-3891 Sep 06 j 01:40	13° \approx 12'17	-2°-9'-2
conjunction	-3898 Feb 14 j 22:07	26° $\overline{3}$ 16'58	-1°-39'-33	direct	-3891 Nov 22 j 08:14	11° \approx 48'29	
minimum elong	-3898 Feb 14 j 22:06	26° $\overline{3}$ 16'58	1°39'42				
max. Earth dist.	-3898 Feb 15 j 22:27	26° $\overline{3}$ 19'15	30.85472 AU	conjunction	-3890 Mar 05 j 11:56	14° \approx 17'50	-2°-1'-42
retrograde	-3898 Jun 02 j 14:58	28° $\overline{3}$ 51'58		minimum elong	-3890 Mar 05 j 11:55	14° \approx 17'50	2°01'49
opposition	-3898 Aug 21 j 16:51	27° $\overline{3}$ 26'35	-1°-48'-18	max. Earth dist.	-3890 Mar 06 j 08:45	14° \approx 19'48	30.82262 AU
min. Earth dist.	-3898 Aug 20 j 18:29	27° $\overline{3}$ 28'10	28.85491 AU		-3890 Mar 24 j 10:56	15° \approx	
direct	-3898 Nov 06 j 20:46	26° $\overline{3}$ 03'16		retrograde	-3890 Jun 21 j 01:04	16° \approx 52'32	
				opposition	-3890 Sep 08 j 12:44	15° \approx 27'08	-2°-11'-14
conjunction	-3897 Feb 17 j 11:41	28° $\overline{3}$ 32'00	-1°-42'-54	min. Earth dist.	-3890 Sep 07 j 18:14	15° \approx 28'27	28.82305 AU
minimum elong	-3897 Feb 17 j 11:41	28° $\overline{3}$ 32'00	1°43'04		-3890 Sep 24 j 18:35	15° \approx	
max. Earth dist.	-3897 Feb 18 j 12:32	28° $\overline{3}$ 34'20	30.85246 AU	direct	-3890 Nov 24 j 19:38	14° \approx 03'16	
	-3897 Mar 30 j 22:03	0° \approx			-3889 Jan 22 j 18:40	15° \approx	
retrograde	-3897 Jun 05 j 04:37	1° \approx 07'01					
	-3897 Aug 13 j 05:57	30° \overline{R} 3		conjunction	-3889 Mar 08 j 01:45	16° \approx 32'42	-2°-3'-40
min. Earth dist.	-3897 Aug 23 j 06:42	29° $\overline{3}$ 43'13	28.85231 AU	minimum elong	-3889 Mar 08 j 01:45	16° \approx 32'42	2°03'48
opposition	-3897 Aug 24 j 04:35	29° $\overline{3}$ 41'41	-1°-51'-47	max. Earth dist.	-3889 Mar 08 j 21:09	16° \approx 34'31	30.82075 AU
direct	-3897 Nov 09 j 09:52	28° $\overline{3}$ 18'20		retrograde	-3889 Jun 23 j 13:34	19° \approx 07'21	
	-3896 Jan 29 j 19:10	0° \approx		min. Earth dist.	-3889 Sep 10 j 06:19	17° \approx 43'13	28.82199 AU
conjunction	-3896 Feb 20 j 01:06	0° \approx 47'11	-1°-46'-5	opposition	-3889 Sep 11 j 00:01	17° \approx 41'58	-2°-13'-14
minimum elong	-3896 Feb 20 j 01:06	0° \approx 47'11	1°46'14	direct	-3889 Nov 27 j 05:53	16° \approx 18'03	
max. Earth dist.	-3896 Feb 21 j 00:17	0° \approx 49'22	30.84943 AU				
retrograde	-3896 Jun 06 j 19:29	3° \approx 22'14		conjunction	-3888 Mar 09 j 15:41	18° \approx 47'36	-2°-5'-27
opposition	-3896 Aug 25 j 16:22	1° \approx 56'54	-1°-55'-7	minimum elong	-3888 Mar 09 j 15:41	18° \approx 47'36	2°05'34
min. Earth dist.	-3896 Aug 24 j 18:51	1° \approx 58'24	28.84884 AU	max. Earth dist.	-3888 Mar 10 j 11:51	18° \approx 49'29	30.82031 AU
direct	-3896 Nov 10 j 21:39	0° \approx 33'30		retrograde	-3888 Jun 25 j 01:31	21° \approx 22'11	
				opposition	-3888 Sep 12 j 11:13	19° \approx 56'50	-2°-15'-3
conjunction	-3895 Feb 21 j 14:54	3° \approx 02'27	-1°-49'-7	min. Earth dist.	-3888 Sep 11 j 17:50	19° \approx 58'04	28.82213 AU
minimum elong	-3895 Feb 21 j 14:54	3° \approx 02'27	1°49'17	direct	-3888 Nov 28 j 18:15	18° \approx 32'53	
max. Earth dist.	-3895 Feb 22 j 14:03	3° \approx 04'38	30.84531 AU				
retrograde	-3895 Jun 09 j 08:13	5° \approx 37'28		conjunction	-3887 Mar 12 j 05:44	21° \approx 02'33	-2°-7'-2
min. Earth dist.	-3895 Aug 27 j 07:45	4° \approx 13'33	28.84429 AU	minimum elong	-3887 Mar 12 j 05:44	21° \approx 02'33	2°07'10
opposition	-3895 Aug 28 j 03:58	4° \approx 12'08	-1°-58'-16	max. Earth dist.	-3887 Mar 13 j 00:18	21° \approx 04'18	30.82107 AU
direct	-3895 Nov 13 j 09:42	2° \approx 48'40		retrograde	-3887 Jun 27 j 15:51	23° \approx 37'06	
				opposition	-3887 Sep 14 j 22:15	22° \approx 11'48	-2°-16'-38
conjunction	-3894 Feb 24 j 04:42	5° \approx 17'42	-1°-51'-59	min. Earth dist.	-3887 Sep 14 j 05:13	22° \approx 13'01	28.82337 AU
minimum elong	-3894 Feb 24 j 04:42	5° \approx 17'42	1°52'08	direct	-3887 Dec 01 j 05:12	20° \approx 47'49	
max. Earth dist.	-3894 Feb 25 j 02:45	5° \approx 19'47	30.84047 AU				
retrograde	-3894 Jun 11 j 23:27	7° \approx 52'40		conjunction	-3886 Mar 14 j 20:04	23° \approx 17'38	-2°-8'-26
opposition	-3894 Aug 30 j 15:29	6° \approx 27'18	-2°-1'-14	minimum elong	-3886 Mar 14 j 20:04	23° \approx 17'38	2°08'33
min. Earth dist.	-3894 Aug 29 j 19:08	6° \approx 28'45	28.83919 AU	max. Earth dist.	-3886 Mar 15 j 14:45	23° \approx 19'23	30.82249 AU
direct	-3894 Nov 15 j 22:34	5° \approx 03'46		retrograde	-3886 Jun 30 j 04:31	25° \approx 52'07	
				opposition	-3886 Sep 17 j 09:26	24° \approx 26'54	-2°-18'-1
conjunction	-3893 Feb 26 j 18:22	7° \approx 32'53	-1°-54'-40	min. Earth dist.	-3886 Sep 16 j 17:42	24° \approx 28'01	28.82495 AU
minimum elong	-3893 Feb 26 j 18:22	7° \approx 32'53	1°54'50	direct	-3886 Dec 03 j 17:04	23° \approx 02'54	
max. Earth dist.	-3893 Feb 27 j 15:56	7° \approx 34'55	30.83511 AU				
retrograde	-3893 Jun 14 j 11:52	10° \approx 07'47		conjunction	-3885 Mar 17 j 10:16	25° \approx 32'50	-2°-9'-38
min. Earth dist.	-3893 Sep 01 j 08:09	8° \approx 43'44	28.83397 AU	minimum elong	-3885 Mar 17 j 10:16	25° \approx 32'50	2°09'45
opposition	-3893 Sep 02 j 03:01	8° \approx 42'24	-2°-4'-2	max. Earth dist.	-3885 Mar 18 j 03:35	25° \approx 34'28	30.82411 AU
				retrograde	-3885 Jul 02 j 19:45	28° \approx 07'16	

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Attention, astronomical year style is used: The year -3885 in astronomical counting style is the year 3886 BCE in historical counting style.

opposition	-3885 Sep 19 j 20:30	26° 44 42'06	-2°-19'-11	max. Earth dist.	-3877 Apr 05 j 16:48	13° 48 35'03	30.82497 AU
min. Earth dist.	-3885 Sep 19 j 04:51	26° 44 43'13	28.82644 AU	retrograde	-3877 Jul 20 j 22:08	16° 48 07'37	
direct	-3885 Dec 06 j 06:02	25° 44 18'05		opposition	-3877 Oct 07 j 11:31	14° 48 42'41	-2°-20'-52
				min. Earth dist.	-3877 Oct 07 j 02:59	14° 48 43'17	28.82810 AU
conjunction	-3884 Mar 19 j 00:43	27° 44 48'09	-2°-10'-38	direct	-3877 Dec 24 j 03:05	13° 48 18'07	
minimum elong	-3884 Mar 19 j 00:43	27° 44 48'09	2°10'44				
max. Earth dist.	-3884 Mar 19 j 17:14	27° 44 49'42	30.82521 AU	conjunction	-3876 Apr 06 j 20:38	15° 48 48'55	-2°-11'-24
	-3884 May 28 j 03:51	0° 48		minimum elong	-3876 Apr 06 j 20:38	15° 48 48'55	2°11'28
retrograde	-3884 Jul 04 j 08:12	0° 48 22'31		max. Earth dist.	-3876 Apr 07 j 05:52	15° 48 49'46	30.82842 AU
	-3884 Aug 10 j 21:49	30° 48 R 48		retrograde	-3876 Jul 22 j 12:21	18° 48 22'20	
opposition	-3884 Sep 21 j 07:40	28° 48 57'24	-2°-20'-9	opposition	-3876 Oct 08 j 22:01	16° 48 57'28	-2°-20'-7
min. Earth dist.	-3884 Sep 20 j 17:58	28° 48 58'22	28.82723 AU	min. Earth dist.	-3876 Oct 08 j 13:18	16° 48 58'05	28.83229 AU
direct	-3884 Dec 07 j 17:35	27° 48 33'19		direct	-3876 Dec 25 j 16:21	15° 48 32'51	
	-3883 Mar 20 j 01:53	0° 48					
conjunction	-3883 Mar 21 j 15:20	0° 48 03'30	-2°-11'-25	conjunction	-3875 Apr 09 j 11:13	18° 48 03'47	-2°-10'-36
minimum elong	-3883 Mar 21 j 15:20	0° 48 03'30	2°11'32	minimum elong	-3875 Apr 09 j 11:13	18° 48 03'47	2°10'40
max. Earth dist.	-3883 Mar 22 j 06:51	0° 48 04'57	30.82564 AU	max. Earth dist.	-3875 Apr 09 j 20:06	18° 48 04'36	30.83328 AU
retrograde	-3883 Jul 06 j 22:03	2° 48 37'46		retrograde	-3875 Jul 25 j 00:06	20° 48 37'05	
opposition	-3883 Sep 23 j 18:41	1° 48 12'42	-2°-20'-54	opposition	-3875 Oct 11 j 08:44	19° 48 12'18	-2°-19'-8
min. Earth dist.	-3883 Sep 23 j 04:58	1° 48 13'40	28.82713 AU	min. Earth dist.	-3875 Oct 11 j 01:41	19° 48 12'48	28.83777 AU
	-3883 Nov 14 j 05:02	30° 48 R 48		direct	-3875 Dec 28 j 04:04	17° 48 47'41	
direct	-3883 Dec 10 j 06:35	29° 48 48'34		conjunction	-3874 Apr 12 j 01:46	20° 48 18'43	-2°-9'-35
	-3882 Jan 04 j 23:37	0° 48		minimum elong	-3874 Apr 12 j 01:46	20° 48 18'43	2°09'38
conjunction	-3882 Mar 24 j 05:51	2° 48 18'50	-2°-12'-1	max. Earth dist.	-3874 Apr 12 j 09:50	20° 48 19'28	30.83938 AU
minimum elong	-3882 Mar 24 j 05:51	2° 48 18'50	2°12'07	retrograde	-3874 Jul 27 j 14:14	22° 48 51'55	
max. Earth dist.	-3882 Mar 24 j 19:39	2° 48 20'08	30.82508 AU	opposition	-3874 Oct 13 j 19:13	21° 48 27'14	-2°-17'-57
retrograde	-3882 Jul 09 j 10:46	4° 48 53'00		min. Earth dist.	-3874 Oct 13 j 11:59	21° 48 27'45	28.84417 AU
opposition	-3882 Sep 26 j 05:42	3° 48 27'57	-2°-21'-26	direct	-3874 Dec 30 j 16:58	20° 48 02'36	
min. Earth dist.	-3882 Sep 25 j 17:48	3° 48 28'47	28.82633 AU	conjunction	-3873 Apr 14 j 16:20	22° 48 33'46	-2°-8'-22
direct	-3882 Dec 12 j 17:10	2° 48 03'44		minimum elong	-3873 Apr 14 j 16:21	22° 48 33'46	2°08'25
conjunction	-3881 Mar 26 j 20:28	4° 48 34'06	-2°-12'-25	max. Earth dist.	-3873 Apr 14 j 23:01	22° 48 34'23	30.84602 AU
minimum elong	-3881 Mar 26 j 20:28	4° 48 34'06	2°12'31	retrograde	-3873 Jul 30 j 03:40	25° 48 06'51	
max. Earth dist.	-3881 Mar 27 j 10:06	4° 48 35'23	30.82414 AU	opposition	-3873 Oct 16 j 05:54	23° 48 42'15	-2°-16'-32
retrograde	-3881 Jul 11 j 23:04	7° 48 08'08		min. Earth dist.	-3873 Oct 16 j 00:28	23° 48 42'38	28.85094 AU
opposition	-3881 Sep 28 j 16:33	5° 48 43'06	-2°-21'-45	direct	-3872 Jan 02 j 04:04	22° 48 17'37	
min. Earth dist.	-3881 Sep 28 j 04:46	5° 48 43'56	28.82524 AU	conjunction	-3872 Apr 16 j 07:01	24° 48 48'53	-2°-6'-58
direct	-3881 Dec 15 j 05:12	4° 48 18'49		minimum elong	-3872 Apr 16 j 07:02	24° 48 48'53	2°07'00
conjunction	-3880 Mar 28 j 10:46	6° 48 49'14	-2°-12'-37	max. Earth dist.	-3872 Apr 16 j 13:15	24° 48 49'28	30.85274 AU
minimum elong	-3880 Mar 28 j 10:46	6° 48 49'14	2°12'42	retrograde	-3872 Jul 31 j 16:00	27° 48 21'50	
max. Earth dist.	-3880 Mar 28 j 22:34	6° 48 50'21	30.82316 AU	opposition	-3872 Oct 17 j 16:30	25° 48 57'20	-2°-14'-56
retrograde	-3880 Jul 13 j 10:40	9° 48 23'10		min. Earth dist.	-3872 Oct 17 j 11:28	25° 48 57'42	28.85727 AU
opposition	-3880 Sep 30 j 03:26	7° 48 58'08	-2°-21'-51	direct	-3871 Jan 03 j 16:53	24° 48 32'41	
min. Earth dist.	-3880 Sep 29 j 16:55	7° 48 58'53	28.82450 AU	conjunction	-3871 Apr 18 j 21:46	27° 48 04'02	-2°-5'-22
direct	-3880 Dec 16 j 15:59	6° 48 33'46		minimum elong	-3871 Apr 18 j 21:47	27° 48 04'02	2°05'23
conjunction	-3879 Mar 31 j 01:25	9° 48 04'17	-2°-12'-37	max. Earth dist.	-3871 Apr 19 j 01:43	27° 48 04'24	30.85873 AU
minimum elong	-3879 Mar 31 j 01:25	9° 48 04'17	2°12'42	retrograde	-3871 Aug 03 j 03:53	29° 48 36'51	
max. Earth dist.	-3879 Mar 31 j 13:33	9° 48 05'25	30.82268 AU	opposition	-3871 Oct 20 j 03:08	28° 48 12'24	-2°-13'-7
retrograde	-3879 Jul 15 j 21:33	11° 48 38'04		min. Earth dist.	-3871 Oct 19 j 23:41	28° 48 12'39	28.86289 AU
opposition	-3879 Oct 02 j 14:04	10° 48 13'03	-2°-21'-44	direct	-3870 Jan 06 j 03:51	26° 48 47'42	
min. Earth dist.	-3879 Oct 02 j 04:11	10° 48 13'46	28.82439 AU	conjunction	-3870 Apr 21 j 12:38	29° 48 19'08	-2°-3'-35
direct	-3879 Dec 19 j 04:17	8° 48 48'36		minimum elong	-3870 Apr 21 j 12:38	29° 48 19'08	2°03'36
conjunction	-3878 Apr 02 j 15:51	11° 48 19'13	-2°-12'-25	max. Earth dist.	-3870 Apr 21 j 16:24	29° 48 19'29	30.86392 AU
minimum elong	-3878 Apr 02 j 15:51	11° 48 19'13	2°12'29		-3870 May 10 j 00:15	0° 48 Y	
max. Earth dist.	-3878 Apr 03 j 02:07	11° 48 20'10	30.82318 AU	retrograde	-3870 Aug 05 j 14:56	1° 48 Y51'46	
retrograde	-3878 Jul 18 j 10:53	13° 48 52'52		opposition	-3870 Oct 22 j 13:48	0° 48 Y27'24	-2°-11'-6
opposition	-3878 Oct 05 j 00:47	12° 48 27'54	-2°-21'-25	min. Earth dist.	-3870 Oct 22 j 11:22	0° 48 Y27'34	28.86756 AU
min. Earth dist.	-3878 Oct 04 j 15:12	12° 48 28'35	28.82557 AU		-3870 Nov 07 j 21:15	30° 48 R 48	
direct	-3878 Dec 21 j 14:59	11° 48 03'22		direct	-3869 Jan 08 j 16:02	29° 48 02'38	
					-3869 Mar 09 j 19:22	0° 48 Y	
conjunction	-3877 Apr 05 j 06:13	13° 48 34'04	-2°-12'-1	conjunction	-3869 Apr 24 j 03:05	1° 48 Y34'06	-2°-1'-36
minimum elong	-3877 Apr 05 j 06:13	13° 48 34'04	2°12'05	minimum elong	-3869 Apr 24 j 03:05	1° 48 Y34'06	2°01'37

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Attention, astronomical year style is used: The year -3869 in astronomical counting style is the year 3870 BCE in historical counting style.

max. Earth dist.	-3869 Apr 24 j 04:31	1°♈34'14	30.86836 AU	min. Earth dist.	-3861 Nov 11 j 16:10	20°♈35'56	28.92687 AU
retrograde	-3869 Aug 08 j 03:22	4°♈06'35		direct	-3860 Jan 29 j 05:41	19°♈11'12	
opposition	-3869 Oct 25 j 00:22	2°♈42'14	-2°-8'-53				
min. Earth dist.	-3869 Oct 24 j 22:39	2°♈42'21	28.87173 AU	conjunction	-3860 May 14 j 12:37	21°♈43'16	-1°-36'-4
direct	-3868 Jan 11 j 02:58	1°♈17'23		minimum elong	-3860 May 14 j 12:38	21°♈43'16	1°36'03
				max. Earth dist.	-3860 May 14 j 05:51	21°♈42'38	30.93116 AU
conjunction	-3868 Apr 25 j 17:48	3°♈48'54	-1°-59'-27	retrograde	-3860 Aug 27 j 13:19	24°♈14'17	
minimum elong	-3868 Apr 25 j 17:48	3°♈48'54	1°59'28	opposition	-3860 Nov 12 j 21:40	22°♈50'38	-1°-40'-48
max. Earth dist.	-3868 Apr 25 j 19:05	3°♈49'02	30.87236 AU	min. Earth dist.	-3860 Nov 13 j 03:11	22°♈50'14	28.93697 AU
retrograde	-3868 Aug 09 j 13:10	6°♈21'11		direct	-3859 Jan 30 j 16:07	21°♈25'33	
opposition	-3868 Oct 26 j 10:48	4°♈56'53	-2°-6'-30				
min. Earth dist.	-3868 Oct 26 j 10:38	4°♈56'53	28.87560 AU	conjunction	-3859 May 17 j 03:08	23°♈57'42	-1°-32'-27
direct	-3867 Jan 12 j 15:28	3°♈31'58		minimum elong	-3859 May 17 j 03:08	23°♈57'42	1°32'24
				max. Earth dist.	-3859 May 16 j 20:08	23°♈57'03	30.94087 AU
conjunction	-3867 Apr 28 j 08:21	6°♈03'31	-1°-57'-7	retrograde	-3859 Aug 29 j 22:48	26°♈28'35	
minimum elong	-3867 Apr 28 j 08:22	6°♈03'31	1°57'07	opposition	-3859 Nov 15 j 08:15	25°♈05'01	-1°-36'-50
max. Earth dist.	-3867 Apr 28 j 07:44	6°♈03'28	30.87645 AU	min. Earth dist.	-3859 Nov 15 j 15:28	25°♈04'30	28.94616 AU
retrograde	-3867 Aug 12 j 01:54	8°♈35'37		direct	-3858 Feb 02 j 04:26	23°♈39'56	
opposition	-3867 Oct 28 j 21:10	7°♈11'19	-2°-3'-54				
min. Earth dist.	-3867 Oct 28 j 21:05	7°♈11'20	28.87980 AU	conjunction	-3858 May 19 j 17:17	26°♈12'09	-1°-28'-40
direct	-3866 Jan 15 j 04:40	5°♈46'20		minimum elong	-3858 May 19 j 17:17	26°♈12'09	1°28'38
				max. Earth dist.	-3858 May 19 j 08:04	26°♈11'17	30.94963 AU
conjunction	-3866 Apr 30 j 22:49	8°♈17'57	-1°-54'-36	retrograde	-3858 Sep 01 j 11:01	28°♈42'52	
minimum elong	-3866 Apr 30 j 22:49	8°♈17'57	1°54'37	opposition	-3858 Nov 17 j 18:40	27°♈19'23	-1°-32'-45
max. Earth dist.	-3866 Apr 30 j 21:52	8°♈17'51	30.88089 AU	min. Earth dist.	-3858 Nov 18 j 02:07	27°♈18'51	28.95432 AU
retrograde	-3866 Aug 14 j 12:31	10°♈49'51		direct	-3857 Feb 04 j 16:59	25°♈54'16	
opposition	-3866 Oct 31 j 07:37	9°♈25'36	-2°-1'-8				
min. Earth dist.	-3866 Oct 31 j 09:15	9°♈25'29	28.88467 AU	conjunction	-3857 May 22 j 07:33	28°♈26'31	-1°-24'-47
direct	-3865 Jan 17 j 16:28	8°♈00'33		minimum elong	-3857 May 22 j 07:34	28°♈26'31	1°24'43
				max. Earth dist.	-3857 May 21 j 21:45	28°♈25'36	30.95725 AU
conjunction	-3865 May 03 j 13:10	10°♈32'13	-1°-51'-56		-3857 Jul 06 j 07:35	0°♈	
minimum elong	-3865 May 03 j 13:11	10°♈32'13	1°51'55	retrograde	-3857 Sep 03 j 21:08	0°♈57'04	
max. Earth dist.	-3865 May 03 j 11:18	10°♈32'02	30.88642 AU		-3857 Nov 04 j 10:08	30°♈	
retrograde	-3865 Aug 17 j 01:38	13°♈03'56		opposition	-3857 Nov 20 j 05:08	29°♈33'38	-1°-28'-31
opposition	-3865 Nov 02 j 17:51	11°♈39'45	-1°-58'-11	min. Earth dist.	-3857 Nov 20 j 14:40	29°♈32'58	28.96145 AU
min. Earth dist.	-3865 Nov 02 j 19:09	11°♈39'39	28.89073 AU	direct	-3856 Feb 07 j 04:09	28°♈08'28	
direct	-3864 Jan 20 j 06:00	10°♈14'39			-3856 May 05 j 09:50	0°♈	
conjunction	-3864 May 05 j 03:28	12°♈46'22	-1°-49'-5	conjunction	-3856 May 23 j 21:40	0°♈40'45	-1°-20'-46
minimum elong	-3864 May 05 j 03:28	12°♈46'22	1°49'04	minimum elong	-3856 May 23 j 21:41	0°♈40'45	1°20'42
max. Earth dist.	-3864 May 05 j 00:34	12°♈46'06	30.89313 AU	max. Earth dist.	-3856 May 23 j 10:25	0°♈39'42	30.96408 AU
retrograde	-3864 Aug 18 j 14:01	15°♈17'57		retrograde	-3856 Sep 05 j 09:25	3°♈11'06	
opposition	-3864 Nov 04 j 04:19	13°♈53'49	-1°-55'-3	opposition	-3856 Nov 21 j 15:28	1°♈47'43	-1°-24'-9
min. Earth dist.	-3864 Nov 04 j 07:04	13°♈53'37	28.89814 AU	min. Earth dist.	-3856 Nov 22 j 01:01	1°♈47'02	28.96777 AU
direct	-3863 Jan 21 j 17:49	12°♈28'42		direct	-3855 Feb 08 j 18:40	0°♈22'29	
conjunction	-3863 May 07 j 17:52	15°♈00'30	-1°-46'-4	conjunction	-3855 May 26 j 11:42	2°♈54'46	-1°-16'-38
minimum elong	-3863 May 07 j 17:52	15°♈00'30	1°46'03	minimum elong	-3855 May 26 j 11:42	2°♈54'46	1°16'33
max. Earth dist.	-3863 May 07 j 14:44	15°♈00'12	30.90131 AU	max. Earth dist.	-3855 May 25 j 23:16	2°♈53'37	30.97014 AU
retrograde	-3863 Aug 21 j 01:49	17°♈31'55		retrograde	-3855 Sep 07 j 20:45	5°♈24'56	
opposition	-3863 Nov 06 j 14:33	16°♈07'53	-1°-51'-44	opposition	-3855 Nov 24 j 01:51	4°♈01'34	-1°-19'-41
min. Earth dist.	-3863 Nov 06 j 17:19	16°♈07'41	28.90681 AU	min. Earth dist.	-3855 Nov 24 j 13:08	4°♈00'46	28.97374 AU
direct	-3862 Jan 24 j 07:04	14°♈42'46		direct	-3854 Feb 11 j 07:24	2°♈36'17	
conjunction	-3862 May 10 j 08:07	17°♈14'39	-1°-42'-54	conjunction	-3854 May 29 j 01:35	5°♈08'34	-1°-12'-23
minimum elong	-3862 May 10 j 08:08	17°♈14'39	1°42'53	minimum elong	-3854 May 29 j 01:35	5°♈08'34	1°12'19
max. Earth dist.	-3862 May 10 j 03:20	17°♈14'13	30.91066 AU	max. Earth dist.	-3854 May 28 j 12:44	5°♈07'23	30.97621 AU
retrograde	-3862 Aug 23 j 13:53	19°♈45'56		retrograde	-3854 Sep 10 j 07:53	7°♈38'31	
opposition	-3862 Nov 09 j 00:59	18°♈22'02	-1°-48'-15	opposition	-3854 Nov 26 j 12:11	6°♈15'11	-1°-15'-5
min. Earth dist.	-3862 Nov 09 j 04:52	18°♈21'45	28.91665 AU	min. Earth dist.	-3854 Nov 26 j 23:30	6°♈14'23	28.97982 AU
direct	-3861 Jan 26 j 17:46	16°♈56'56		direct	-3853 Feb 13 j 21:30	4°♈49'51	
conjunction	-3861 May 12 j 22:21	19°♈28'55	-1°-39'-34	conjunction	-3853 May 31 j 15:04	7°♈22'07	-1°-8'-3
minimum elong	-3861 May 12 j 22:21	19°♈28'55	1°39'31	minimum elong	-3853 May 31 j 15:05	7°♈22'07	1°07'57
max. Earth dist.	-3861 May 12 j 17:49	19°♈28'29	30.92087 AU	max. Earth dist.	-3853 May 31 j 00:45	7°♈20'48	30.98259 AU
retrograde	-3861 Aug 26 j 01:07	22°♈00'04		retrograde	-3853 Sep 12 j 19:37	9°♈51'53	
opposition	-3861 Nov 11 j 11:23	20°♈36'17	-1°-44'-36	opposition	-3853 Nov 28 j 22:31	8°♈28'35	-1°-10'-24

Planetary Phenomena of Neptune from -3900 through -3400 (UT), Astrodienst AG 7-Dez-2017 14:38, page 4

Attention, astronomical year style is used: The year -3853 in astronomical counting style is the year 3854 BCE in historical counting style.

min. Earth dist.	-3853 Nov 29 j 10:49	8° $\text{8}^{\circ}27'42''$	28.98662 AU	min. Earth dist.	-3845 Dec 17 j 03:04	26° $\text{8}^{\circ}11'39''$	29.06517 AU
direct	-3852 Feb 16 j 09:11	7° $\text{8}^{\circ}03'11''$		direct	-3844 Mar 05 j 11:14	24° $\text{8}^{\circ}47'28''$	
conjunction	-3852 Jun 02 j 04:45	9° $\text{8}^{\circ}35'27''$	-1°-3'-36	conjunction	-3844 Jun 20 j 14:59	27° $\text{8}^{\circ}19'54''$	0°-25'-18
minimum elong	-3852 Jun 02 j 04:46	9° $\text{8}^{\circ}35'27''$	1°03'32	minimum elong	-3844 Jun 20 j 14:59	27° $\text{8}^{\circ}19'54''$	0°25'11
max. Earth dist.	-3852 Jun 01 j 14:50	9° $\text{8}^{\circ}34'10''$	30.98986 AU	max. Earth dist.	-3844 Jun 19 j 18:01	27° $\text{8}^{\circ}17'58''$	31.06888 AU
retrograde	-3852 Sep 14 j 06:15	12° $\text{8}^{\circ}05'01''$		retrograde	-3844 Oct 01 j 20:49	29° $\text{8}^{\circ}48'20''$	
opposition	-3852 Nov 30 j 08:46	10° $\text{8}^{\circ}41'46''$	-1°-5'-36	opposition	-3844 Dec 17 j 20:12	28° $\text{8}^{\circ}25'43''$	0°-24'-23
min. Earth dist.	-3852 Nov 30 j 21:39	10° $\text{8}^{\circ}40'51''$	28.99432 AU	min. Earth dist.	-3844 Dec 18 j 14:40	28° $\text{8}^{\circ}24'26''$	29.07291 AU
direct	-3851 Feb 17 j 22:33	9° $\text{8}^{\circ}16'20''$		direct	-3843 Mar 07 j 23:18	27° $\text{8}^{\circ}00'18''$	
				max. Earth dist.	-3843 Jun 22 j 07:17	29° $\text{8}^{\circ}30'49''$	31.07620 AU
conjunction	-3851 Jun 04 j 18:13	11° $\text{8}^{\circ}48'36''$	0°-59'-4	conjunction	-3843 Jun 23 j 04:02	29° $\text{8}^{\circ}32'44''$	0°-20'-17
minimum elong	-3851 Jun 04 j 18:14	11° $\text{8}^{\circ}48'36''$	0°58'59	minimum elong	-3843 Jun 23 j 04:02	29° $\text{8}^{\circ}32'44''$	0°20'09
max. Earth dist.	-3851 Jun 04 j 02:38	11° $\text{8}^{\circ}47'10''$	30.99828 AU		-3843 Jul 05 j 10:27	0° II°	
retrograde	-3851 Sep 16 j 17:19	14° $\text{8}^{\circ}18'00''$		retrograde	-3843 Oct 04 j 07:21	2° $\text{II}^{\circ}01'00''$	
opposition	-3851 Dec 02 j 19:06	12° $\text{8}^{\circ}54'49''$	-1°00'-42	opposition	-3843 Dec 20 j 06:49	0° $\text{II}^{\circ}38'26''$	0°-19'00
min. Earth dist.	-3851 Dec 03 j 08:01	12° $\text{8}^{\circ}53'54''$	29.00342 AU	min. Earth dist.	-3843 Dec 21 j 02:03	0° $\text{II}^{\circ}37'05''$	29.07981 AU
direct	-3850 Feb 20 j 09:54	11° $\text{8}^{\circ}29'22''$			-3842 Jan 13 j 00:17	30° R°	
conjunction	-3850 Jun 07 j 07:36	14° $\text{8}^{\circ}01'39''$	0°-54'-27	direct	-3842 Mar 10 j 13:25	29° $\text{8}^{\circ}13'00''$	
minimum elong	-3850 Jun 07 j 07:36	14° $\text{8}^{\circ}01'39''$	0°54'22		-3842 May 04 j 12:54	0° II°	
max. Earth dist.	-3850 Jun 06 j 16:36	14° $\text{8}^{\circ}00'16''$	31.00799 AU	conjunction	-3842 Jun 25 j 16:34	1° $\text{II}^{\circ}45'23''$	0°-15'-15
	-3850 Jul 04 j 03:16	15° 8°		minimum elong	-3842 Jun 25 j 16:35	1° $\text{II}^{\circ}45'23''$	0°15'08
retrograde	-3850 Sep 19 j 02:08	16° $\text{8}^{\circ}30'53''$		behind sun begin	-3842 Jun 25 j 14:34	1° $\text{II}^{\circ}45'13''$	
opposition	-3850 Dec 05 j 05:31	15° $\text{8}^{\circ}07'48''$	0°-55'-43	behind sun end	-3842 Jun 25 j 18:35	1° $\text{II}^{\circ}45'34''$	
min. Earth dist.	-3850 Dec 05 j 19:33	15° $\text{8}^{\circ}06'48''$	29.01362 AU	max. Earth dist.	-3842 Jun 24 j 18:12	1° $\text{II}^{\circ}43'19''$	31.08296 AU
	-3850 Dec 09 j 20:02	15° 8°		retrograde	-3842 Oct 06 j 18:05	4° $\text{II}^{\circ}13'30''$	
direct	-3849 Feb 22 j 21:47	13° $\text{8}^{\circ}42'22''$		opposition	-3842 Dec 22 j 17:18	2° $\text{II}^{\circ}50'58''$	0°-13'-36
	-3849 May 05 j 20:58	15° 8°		min. Earth dist.	-3842 Dec 23 j 12:37	2° $\text{II}^{\circ}49'36''$	29.08654 AU
conjunction	-3849 Jun 09 j 20:52	16° $\text{8}^{\circ}14'41''$	0°-49'-45	direct	-3841 Mar 13 j 01:24	1° $\text{II}^{\circ}25'29''$	
minimum elong	-3849 Jun 09 j 20:53	16° $\text{8}^{\circ}14'41''$	0°49'39	max. Earth dist.	-3841 Jun 27 j 07:30	3° $\text{II}^{\circ}55'50''$	31.08966 AU
max. Earth dist.	-3849 Jun 09 j 04:18	16° $\text{8}^{\circ}13'08''$	31.01881 AU	conjunction	-3841 Jun 28 j 05:15	3° $\text{II}^{\circ}57'51''$	0°-10'-12
retrograde	-3849 Sep 21 j 13:52	18° $\text{8}^{\circ}43'46''$		minimum elong	-3841 Jun 28 j 05:15	3° $\text{II}^{\circ}57'51''$	0°10'04
opposition	-3849 Dec 07 j 15:41	17° $\text{8}^{\circ}20'47''$	0°-50'-39	behind sun begin	-3841 Jun 28 j 00:01	3° $\text{II}^{\circ}57'23''$	
min. Earth dist.	-3849 Dec 08 j 05:30	17° $\text{8}^{\circ}19'48''$	29.02473 AU	behind sun end	-3841 Jun 28 j 10:29	3° $\text{II}^{\circ}58'19''$	
direct	-3848 Feb 25 j 09:06	15° $\text{8}^{\circ}55'21''$		retrograde	-3841 Oct 09 j 02:22	6° $\text{II}^{\circ}25'48''$	
conjunction	-3848 Jun 11 j 10:18	18° $\text{8}^{\circ}27'43''$	0°-44'-58	opposition	-3841 Dec 25 j 03:45	5° $\text{II}^{\circ}03'18''$	0°-8'-12
minimum elong	-3848 Jun 11 j 10:18	18° $\text{8}^{\circ}27'43''$	0°44'53	min. Earth dist.	-3841 Dec 26 j 00:12	5° $\text{II}^{\circ}01'52''$	29.09339 AU
max. Earth dist.	-3848 Jun 10 j 17:42	18° $\text{8}^{\circ}26'11''$	31.03004 AU	direct	-3840 Mar 14 j 13:45	3° $\text{II}^{\circ}37'47''$	
retrograde	-3848 Sep 22 j 23:26	20° $\text{8}^{\circ}56'42''$		conjunction	-3840 Jun 29 j 17:37	6° $\text{II}^{\circ}10'07''$	0°-5'-10
opposition	-3848 Dec 09 j 02:11	19° $\text{8}^{\circ}33'48''$	0°-45'-31	minimum elong	-3840 Jun 29 j 17:38	6° $\text{II}^{\circ}10'07''$	0°05'03
min. Earth dist.	-3848 Dec 09 j 17:48	19° $\text{8}^{\circ}32'42''$	29.03594 AU	behind sun begin	-3840 Jun 29 j 11:16	6° $\text{II}^{\circ}09'33''$	
direct	-3847 Feb 26 j 19:39	18° $\text{8}^{\circ}08'24''$		behind sun end	-3840 Jun 30 j 00:00	6° $\text{II}^{\circ}10'41''$	
conjunction	-3847 Jun 13 j 23:33	20° $\text{8}^{\circ}40'48''$	0°-40'-7	max. Earth dist.	-3840 Jun 28 j 18:32	6° $\text{II}^{\circ}07'58''$	31.09687 AU
minimum elong	-3847 Jun 13 j 23:34	20° $\text{8}^{\circ}40'48''$	0°40'00	retrograde	-3840 Oct 10 j 13:32	8° $\text{II}^{\circ}37'55''$	
max. Earth dist.	-3847 Jun 13 j 05:47	20° $\text{8}^{\circ}39'09''$	31.04113 AU	opposition	-3840 Dec 26 j 14:13	7° $\text{II}^{\circ}15'27''$	0°-2'-47
retrograde	-3847 Sep 25 j 10:56	23° $\text{8}^{\circ}09'39''$		min. Earth dist.	-3840 Dec 27 j 10:02	7° $\text{II}^{\circ}14'04''$	29.10100 AU
opposition	-3847 Dec 11 j 12:35	21° $\text{8}^{\circ}46'51''$	0°-40'-18	direct	-3839 Mar 17 j 01:12	5° $\text{II}^{\circ}49'55''$	
min. Earth dist.	-3847 Dec 12 j 04:04	21° $\text{8}^{\circ}45'45''$	29.04663 AU	max. Earth dist.	-3839 Jul 01 j 07:25	8° $\text{II}^{\circ}20'08''$	31.10490 AU
direct	-3846 Mar 01 j 09:30	20° $\text{8}^{\circ}21'28''$		conjunction	-3839 Jul 02 j 05:58	8° $\text{II}^{\circ}22'13''$	0°00'-1
conjunction	-3846 Jun 16 j 12:50	22° $\text{8}^{\circ}53'53''$	0°-35'-13	minimum elong	-3839 Jul 02 j 05:58	8° $\text{II}^{\circ}22'13''$	0°00'07
minimum elong	-3846 Jun 16 j 12:50	22° $\text{8}^{\circ}53'53''$	0°35'07	behind sun begin	-3839 Jul 01 j 23:35	8° $\text{II}^{\circ}21'39''$	
max. Earth dist.	-3846 Jun 15 j 18:07	22° $\text{8}^{\circ}52'09''$	31.05137 AU	behind sun end	-3839 Jul 02 j 12:20	8° $\text{II}^{\circ}22'47''$	
retrograde	-3846 Sep 27 j 21:59	25° $\text{8}^{\circ}22'37''$		asc. node	-3839 Jul 05 j 07:20	8° $\text{II}^{\circ}29'03''$	
opposition	-3846 Dec 13 j 23:12	23° $\text{8}^{\circ}59'53''$	0°-35'-2	retrograde	-3839 Oct 12 j 21:56	10° $\text{II}^{\circ}49'54''$	
min. Earth dist.	-3846 Dec 14 j 16:18	23° $\text{8}^{\circ}58'41''$	29.05650 AU	opposition	-3839 Dec 29 j 00:53	9° $\text{II}^{\circ}27'29''$	0°02'37
direct	-3845 Mar 03 j 21:20	22° $\text{8}^{\circ}34'30''$		min. Earth dist.	-3839 Dec 29 j 21:51	9° $\text{II}^{\circ}26'01''$	29.10970 AU
max. Earth dist.	-3845 Jun 18 j 06:38	25° $\text{8}^{\circ}05'09''$	31.06073 AU	direct	-3838 Mar 19 j 11:35	8° $\text{II}^{\circ}01'57''$	
conjunction	-3845 Jun 19 j 01:55	25° $\text{8}^{\circ}06'56''$	0°-30'-17	conjunction	-3838 Jul 04 j 18:04	10° $\text{II}^{\circ}34'13''$	0°05'06
minimum elong	-3845 Jun 19 j 01:55	25° $\text{8}^{\circ}06'56''$	0°30'09	minimum elong	-3838 Jul 04 j 18:05	10° $\text{II}^{\circ}34'13''$	0°05'14
retrograde	-3845 Sep 30 j 08:59	27° $\text{8}^{\circ}35'31''$		behind sun begin	-3838 Jul 04 j 11:45	10° $\text{II}^{\circ}33'39''$	
opposition	-3845 Dec 16 j 09:44	26° $\text{8}^{\circ}12'52''$	0°-29'-44	behind sun end	-3838 Jul 05 j 00:25	10° $\text{II}^{\circ}34'47''$	

Attention, astronomical year style is used: The year -3838 in astronomical counting style is the year 3839 BCE in historical counting style.

max. Earth dist.	-3838 Jul 03 j 19:04	10°II32'05	31.11430 AU	minimum elong	-3830 Jul 22 j 17:02	28°II09'57	0°44'49
retrograde	-3838 Oct 15 j 08:08	13°II01'47		max. Earth dist.	-3830 Jul 21 j 15:36	28°II07'35	31.19092 AU
opposition	-3838 Dec 31 j 11:22	11°II39'26	0°08'02		-3830 Sep 15 j 23:04	0°☾	
min. Earth dist.	-3837 Jan 01 j 07:29	11°II38'02	29.11968 AU	retrograde	-3830 Nov 01 j 19:35	0°☾36'48	
direct	-3837 Mar 22 j 00:48	10°II13'55			-3830 Dec 20 j 06:40	30°RII	
max. Earth dist.	-3837 Jul 06 j 07:01	12°II44'03	31.12481 AU	opposition	-3829 Jan 18 j 02:21	29°II14'51	0°50'12
				min. Earth dist.	-3829 Jan 19 j 02:34	29°II13'11	29.19442 AU
conjunction	-3837 Jul 07 j 06:08	12°II46'11	0°10'08	direct	-3829 Apr 09 j 03:03	27°II49'31	
minimum elong	-3837 Jul 07 j 06:07	12°II46'11	0°10'17		-3829 Jul 15 j 13:30	0°☾	
behind sun begin	-3837 Jul 07 j 00:58	12°II45'44		max. Earth dist.	-3829 Jul 24 j 02:26	0°☾19'04	31.19677 AU
behind sun end	-3837 Jul 07 j 11:17	12°II46'39					
retrograde	-3837 Oct 17 j 18:28	15°II13'40		conjunction	-3829 Jul 25 j 04:22	0°☾21'29	0°49'23
opposition	-3836 Jan 02 j 22:03	13°II51'23	0°13'26	minimum elong	-3829 Jul 25 j 04:21	0°☾21'29	0°49'33
min. Earth dist.	-3836 Jan 03 j 19:09	13°II49'55	29.13070 AU	retrograde	-3829 Nov 04 j 05:11	2°☾48'13	
direct	-3836 Mar 23 j 11:16	12°II25'55		opposition	-3828 Jan 20 j 13:19	1°☾26'17	0°55'12
				min. Earth dist.	-3828 Jan 21 j 12:45	1°☾24'40	29.20003 AU
conjunction	-3836 Jul 08 j 18:11	14°II58'11	0°15'10	direct	-3828 Apr 10 j 16:02	0°☾00'55	
minimum elong	-3836 Jul 08 j 18:11	14°II58'11	0°15'18				
behind sun begin	-3836 Jul 08 j 16:21	14°II58'01		conjunction	-3828 Jul 26 j 15:38	2°☾32'49	0°54'02
behind sun end	-3836 Jul 08 j 20:02	14°II58'21		minimum elong	-3828 Jul 26 j 15:37	2°☾32'49	0°54'11
max. Earth dist.	-3836 Jul 07 j 19:11	14°II56'03	31.13614 AU	max. Earth dist.	-3828 Jul 25 j 13:42	2°☾30'24	31.20224 AU
retrograde	-3836 Oct 19 j 05:03	17°II25'35		retrograde	-3828 Nov 05 j 14:54	4°☾59'28	
opposition	-3835 Jan 04 j 08:39	16°II03'23	0°18'48	opposition	-3827 Jan 22 j 00:24	3°☾37'32	1°00'07
min. Earth dist.	-3835 Jan 05 j 05:33	16°II01'56	29.14207 AU	min. Earth dist.	-3827 Jan 23 j 00:36	3°☾35'52	29.20577 AU
direct	-3835 Mar 26 j 00:13	14°II37'58		direct	-3827 Apr 13 j 02:18	2°☾12'10	
max. Earth dist.	-3835 Jul 10 j 06:07	17°II07'59	31.14749 AU	max. Earth dist.	-3827 Jul 28 j 01:23	4°☾41'37	31.20820 AU
conjunction	-3835 Jul 11 j 06:10	17°II10'13	0°20'11	conjunction	-3827 Jul 29 j 02:45	4°☾43'59	0°58'35
minimum elong	-3835 Jul 11 j 06:10	17°II10'13	0°20'21	minimum elong	-3827 Jul 29 j 02:44	4°☾43'59	0°58'45
retrograde	-3835 Oct 21 j 17:12	19°II37'33		retrograde	-3827 Nov 08 j 00:46	7°☾10'34	
opposition	-3834 Jan 06 j 19:31	18°II15'25	0°24'10	opposition	-3826 Jan 24 j 11:34	5°☾48'38	1°04'57
min. Earth dist.	-3834 Jan 07 j 17:04	18°II13'56	29.15339 AU	min. Earth dist.	-3826 Jan 25 j 11:00	5°☾47'02	29.21207 AU
direct	-3834 Mar 28 j 12:10	16°II50'03		direct	-3826 Apr 15 j 15:16	4°☾23'17	
				max. Earth dist.	-3826 Jul 30 j 11:45	6°☾52'38	31.21490 AU
conjunction	-3834 Jul 13 j 18:02	19°II22'18	0°25'10				
minimum elong	-3834 Jul 13 j 18:02	19°II22'18	0°25'19	conjunction	-3826 Jul 31 j 13:33	6°☾55'03	1°03'04
max. Earth dist.	-3834 Jul 12 j 18:36	19°II20'07	31.15842 AU	minimum elong	-3826 Jul 31 j 13:33	6°☾55'03	1°03'13
retrograde	-3834 Oct 24 j 03:43	21°II49'32		retrograde	-3826 Nov 10 j 12:25	9°☾21'35	
opposition	-3833 Jan 09 j 06:28	20°II27'29	0°29'29	opposition	-3825 Jan 26 j 22:43	7°☾59'41	1°09'41
min. Earth dist.	-3833 Jan 10 j 04:39	20°II25'56	29.16384 AU	min. Earth dist.	-3825 Jan 27 j 22:05	7°☾58'05	29.21940 AU
direct	-3833 Mar 31 j 02:22	19°II02'09		direct	-3825 Apr 18 j 02:43	6°☾34'22	
max. Earth dist.	-3833 Jul 15 j 04:52	21°II32'02	31.16834 AU	max. Earth dist.	-3825 Aug 01 j 23:58	9°☾03'48	31.22264 AU
conjunction	-3833 Jul 16 j 05:52	21°II34'22	0°30'07	conjunction	-3825 Aug 03 j 00:31	9°☾06'05	1°07'27
minimum elong	-3833 Jul 16 j 05:51	21°II34'21	0°30'17	minimum elong	-3825 Aug 03 j 00:31	9°☾06'05	1°07'36
retrograde	-3833 Oct 26 j 14:51	24°II01'31		retrograde	-3825 Nov 12 j 22:33	11°☾32'36	
opposition	-3832 Jan 11 j 17:13	22°II39'30	0°34'45	opposition	-3824 Jan 29 j 09:49	10°☾10'45	1°14'19
min. Earth dist.	-3832 Jan 12 j 15:26	22°II37'58	29.17327 AU	min. Earth dist.	-3824 Jan 30 j 09:15	10°☾09'08	29.22749 AU
direct	-3832 Apr 01 j 14:10	21°II14'11		direct	-3824 Apr 19 j 16:11	8°☾45'30	
				max. Earth dist.	-3824 Aug 03 j 09:58	11°☾14'49	31.23108 AU
conjunction	-3832 Jul 17 j 17:50	23°II46'21	0°35'01				
minimum elong	-3832 Jul 17 j 17:50	23°II46'21	0°35'10	conjunction	-3824 Aug 04 j 11:19	11°☾17'11	1°11'44
max. Earth dist.	-3832 Jul 16 j 17:23	23°II44'05	31.17704 AU	minimum elong	-3824 Aug 04 j 11:19	11°☾17'11	1°11'53
retrograde	-3832 Oct 28 j 00:01	26°II13'24		retrograde	-3824 Nov 14 j 10:03	13°☾43'41	
opposition	-3831 Jan 13 j 04:20	24°II51'26	0°39'58	opposition	-3823 Jan 30 j 21:03	12°☾21'54	1°18'50
min. Earth dist.	-3831 Jan 14 j 03:45	24°II49'49	29.18134 AU	min. Earth dist.	-3823 Jan 31 j 19:47	12°☾20'20	29.23622 AU
direct	-3831 Apr 04 j 03:23	23°II26'07		direct	-3823 Apr 22 j 03:19	10°☾56'43	
max. Earth dist.	-3831 Jul 19 j 03:33	25°II55'50	31.18452 AU				
				conjunction	-3823 Aug 06 j 22:04	13°☾28'23	1°15'55
conjunction	-3831 Jul 20 j 05:24	25°II58'14	0°39'53	minimum elong	-3823 Aug 06 j 22:04	13°☾28'23	1°16'05
minimum elong	-3831 Jul 20 j 05:23	25°II58'14	0°40'02	max. Earth dist.	-3823 Aug 05 j 22:00	13°☾26'08	31.23974 AU
retrograde	-3831 Oct 30 j 11:20	28°II25'10		retrograde	-3823 Nov 16 j 19:39	15°☾54'54	
opposition	-3830 Jan 15 j 15:18	27°II03'14	0°45'07	opposition	-3822 Feb 02 j 08:32	14°☾33'10	1°23'15
min. Earth dist.	-3830 Jan 16 j 14:09	27°II01'39	29.18831 AU	min. Earth dist.	-3822 Feb 03 j 08:00	14°☾31'33	29.24480 AU
direct	-3830 Apr 06 j 15:47	25°II37'54		direct	-3822 Apr 24 j 16:32	13°☾08'04	
				max. Earth dist.	-3822 Aug 08 j 07:47	15°☾37'22	31.24808 AU
conjunction	-3830 Jul 22 j 17:02	28°II09'57	0°44'40				

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Attention, astronomical year style is used: The year -3822 in astronomical counting style is the year 3823 BCE in historical counting style.

conjunction	-3822 Aug 09 j 08:43	15° $\overline{53}$ 9'42	1°19'59	minimum elong	-3814 Aug 26 j 19:23	3° Ω 08'38	1°48'01
minimum elong	-3822 Aug 09 j 08:42	15° $\overline{53}$ 9'42	1°20'08	max. Earth dist.	-3814 Aug 25 j 21:06	3° Ω 06'33	31.27617 AU
retrograde	-3822 Nov 19 j 07:41	18° $\overline{50}$ 6'12		retrograde	-3814 Dec 06 j 15:11	5° Ω 35'02	
opposition	-3821 Feb 04 j 19:50	16° $\overline{54}$ 4'32	1°27'32	opposition	-3813 Feb 22 j 17:27	4° Ω 13'12	1°56'46
min. Earth dist.	-3821 Feb 05 j 18:23	16° $\overline{54}$ 2'59	29.25283 AU	min. Earth dist.	-3813 Feb 23 j 15:28	4° Ω 11'42	29.27879 AU
direct	-3821 Apr 27 j 04:49	15° $\overline{51}$ 9'30		direct	-3813 May 15 j 04:57	2° Ω 48'16	
				max. Earth dist.	-3813 Aug 28 j 06:40	5° Ω 16'59	31.27896 AU
conjunction	-3821 Aug 11 j 19:27	17° $\overline{55}$ 1'06	1°23'57				
minimum elong	-3821 Aug 11 j 19:27	17° $\overline{55}$ 1'06	1°24'06	conjunction	-3813 Aug 29 j 05:10	5° Ω 19'06	1°50'44
max. Earth dist.	-3821 Aug 10 j 19:07	17° $\overline{54}$ 8'49	31.25544 AU	minimum elong	-3813 Aug 29 j 05:09	5° Ω 19'06	1°50'52
retrograde	-3821 Nov 21 j 16:15	20° $\overline{51}$ 7'36		retrograde	-3813 Dec 09 j 02:58	7° Ω 45'30	
opposition	-3820 Feb 07 j 07:28	18° $\overline{55}$ 5'58	1°31'42	opposition	-3812 Feb 25 j 05:13	6° Ω 23'39	1°59'43
min. Earth dist.	-3820 Feb 08 j 07:12	18° $\overline{55}$ 4'20	29.25967 AU	min. Earth dist.	-3812 Feb 26 j 01:32	6° Ω 22'16	29.28204 AU
direct	-3820 Apr 28 j 16:14	17° $\overline{53}$ 0'59		direct	-3812 May 16 j 17:32	4° Ω 58'47	
max. Earth dist.	-3820 Aug 12 j 05:22	20° $\overline{50}$ 0'13	31.26158 AU				
conjunction	-3820 Aug 13 j 06:02	20° $\overline{50}$ 2'31	1°27'47	conjunction	-3812 Aug 30 j 14:57	7° Ω 29'32	1°53'24
minimum elong	-3820 Aug 13 j 06:01	20° $\overline{50}$ 2'31	1°27'55	minimum elong	-3812 Aug 30 j 14:56	7° Ω 29'31	1°53'32
retrograde	-3820 Nov 23 j 01:44	22° $\overline{52}$ 9'01		max. Earth dist.	-3812 Aug 29 j 17:43	7° Ω 27'32	31.28253 AU
opposition	-3819 Feb 08 j 19:03	21° $\overline{50}$ 7'24	1°35'44	retrograde	-3812 Dec 10 j 11:48	9° Ω 55'59	
min. Earth dist.	-3819 Feb 09 j 17:54	21° $\overline{50}$ 5'50	29.26507 AU	opposition	-3811 Feb 26 j 17:13	8° Ω 34'08	2°02'29
direct	-3819 May 01 j 04:49	19° $\overline{54}$ 2'27		min. Earth dist.	-3811 Feb 27 j 13:58	8° Ω 32'44	29.28604 AU
				direct	-3811 May 19 j 04:59	7° Ω 09'20	
conjunction	-3819 Aug 15 j 16:38	22° $\overline{51}$ 3'55	1°31'29	max. Earth dist.	-3811 Sep 01 j 03:58	9° Ω 38'04	31.28683 AU
minimum elong	-3819 Aug 15 j 16:38	22° $\overline{51}$ 3'55	1°31'38	conjunction	-3811 Sep 02 j 00:38	9° Ω 40'00	1°55'55
max. Earth dist.	-3819 Aug 14 j 15:53	22° $\overline{51}$ 1'36	31.26617 AU	minimum elong	-3811 Sep 02 j 00:38	9° Ω 40'00	1°56'03
retrograde	-3819 Nov 25 j 11:45	24° $\overline{54}$ 0'25		retrograde	-3811 Dec 12 j 21:41	12° Ω 06'31	
opposition	-3818 Feb 11 j 06:50	23° $\overline{51}$ 8'47	1°39'37	opposition	-3810 Mar 01 j 05:09	10° Ω 44'42	2°05'05
min. Earth dist.	-3818 Feb 12 j 06:25	23° $\overline{51}$ 7'10	29.26914 AU	min. Earth dist.	-3810 Mar 02 j 00:23	10° Ω 43'23	29.29041 AU
direct	-3818 May 03 j 14:28	21° $\overline{55}$ 3'51		direct	-3810 May 21 j 17:20	9° Ω 19'58	
max. Earth dist.	-3818 Aug 17 j 02:46	24° $\overline{52}$ 2'57	31.26951 AU				
conjunction	-3818 Aug 18 j 03:00	24° $\overline{52}$ 5'13	1°35'03	conjunction	-3810 Sep 04 j 10:14	11° Ω 50'34	1°58'15
minimum elong	-3818 Aug 18 j 02:59	24° $\overline{52}$ 5'13	1°35'11	minimum elong	-3810 Sep 04 j 10:14	11° Ω 50'34	1°58'23
retrograde	-3818 Nov 27 j 21:19	26° $\overline{55}$ 1'41		max. Earth dist.	-3810 Sep 03 j 13:58	11° Ω 48'40	31.29108 AU
opposition	-3817 Feb 13 j 18:31	25° $\overline{53}$ 0'02	1°43'22	retrograde	-3810 Dec 15 j 08:07	14° Ω 17'10	
min. Earth dist.	-3817 Feb 14 j 17:33	25° $\overline{52}$ 8'28	29.27178 AU	opposition	-3809 Mar 03 j 17:15	12° Ω 55'21	2°07'30
direct	-3817 May 06 j 03:48	24° $\overline{50}$ 5'07		min. Earth dist.	-3809 Mar 04 j 12:47	12° Ω 54'02	29.29461 AU
				direct	-3809 May 24 j 03:03	11° Ω 30'42	
conjunction	-3817 Aug 20 j 13:18	26° $\overline{53}$ 6'22	1°38'29	conjunction	-3809 Sep 06 j 19:57	14° Ω 01'15	2°00'26
minimum elong	-3817 Aug 20 j 13:18	26° $\overline{53}$ 6'22	1°38'38	minimum elong	-3809 Sep 06 j 19:57	14° Ω 01'15	2°00'33
max. Earth dist.	-3817 Aug 19 j 12:23	26° $\overline{53}$ 4'02	31.27159 AU	max. Earth dist.	-3809 Sep 06 j 00:40	13° Ω 59'26	31.29491 AU
retrograde	-3817 Nov 30 j 08:34	29° $\overline{50}$ 2'49			-3809 Oct 03 j 13:45	15° Ω	
opposition	-3816 Feb 16 j 06:06	27° $\overline{54}$ 1'07	1°46'57	retrograde	-3809 Dec 17 j 17:49	16° Ω 27'55	
min. Earth dist.	-3816 Feb 17 j 05:12	27° $\overline{53}$ 9'32	29.27357 AU	opposition	-3808 Mar 05 j 05:17	15° Ω 06'07	2°09'44
direct	-3816 May 07 j 14:54	26° $\overline{51}$ 6'10		min. Earth dist.	-3808 Mar 05 j 23:59	15° Ω 04'51	29.29794 AU
					-3808 Mar 08 j 23:24	15° \overline{R} Ω	
conjunction	-3816 Aug 21 j 23:34	28° $\overline{54}$ 7'19	1°41'46	direct	-3808 May 25 j 15:45	13° Ω 41'32	
minimum elong	-3816 Aug 21 j 23:33	28° $\overline{54}$ 7'19	1°41'54		-3808 Aug 05 j 22:36	15° Ω	
max. Earth dist.	-3816 Aug 21 j 00:01	28° $\overline{54}$ 5'07	31.27303 AU	max. Earth dist.	-3808 Sep 07 j 09:50	16° Ω 10'09	31.29771 AU
	-3816 Sep 24 j 16:28	0° Ω					
retrograde	-3816 Dec 01 j 18:09	1° Ω 13'44		conjunction	-3808 Sep 08 j 05:35	16° Ω 12'01	2°02'26
	-3815 Feb 12 j 20:13	30° \overline{R} $\overline{5}$		minimum elong	-3808 Sep 08 j 05:35	16° Ω 12'01	2°02'32
opposition	-3815 Feb 17 j 17:56	29° $\overline{55}$ 1'59	1°50'23	retrograde	-3808 Dec 19 j 05:38	18° Ω 38'46	
min. Earth dist.	-3815 Feb 18 j 16:56	29° $\overline{55}$ 0'25	29.27485 AU	opposition	-3807 Mar 07 j 17:36	17° Ω 16'57	2°11'46
direct	-3815 May 10 j 03:59	28° $\overline{52}$ 7'02		min. Earth dist.	-3807 Mar 08 j 12:02	17° Ω 15'42	29.30030 AU
	-3815 Jul 28 j 21:38	0° Ω		direct	-3807 May 28 j 01:47	15° Ω 52'27	
max. Earth dist.	-3815 Aug 23 j 09:25	0° Ω 55'49	31.27435 AU				
conjunction	-3815 Aug 24 j 09:23	0° Ω 58'04	1°44'55	conjunction	-3807 Sep 10 j 15:13	18° Ω 22'51	2°04'15
minimum elong	-3815 Aug 24 j 09:23	0° Ω 58'04	1°45'03	minimum elong	-3807 Sep 10 j 15:13	18° Ω 22'51	2°04'22
retrograde	-3815 Dec 04 j 05:29	3° Ω 24'28		max. Earth dist.	-3807 Sep 09 j 20:55	18° Ω 21'07	31.29933 AU
opposition	-3814 Feb 20 j 05:42	2° Ω 02'40	1°53'40	retrograde	-3807 Dec 21 j 15:39	20° Ω 49'40	
min. Earth dist.	-3814 Feb 21 j 03:33	2° Ω 01'11	29.27649 AU	opposition	-3806 Mar 10 j 05:59	19° Ω 27'50	2°13'38
direct	-3814 May 12 j 15:18	0° Ω 37'43		min. Earth dist.	-3806 Mar 11 j 00:20	19° Ω 26'36	29.30119 AU
				direct	-3806 May 30 j 13:52	18° Ω 03'23	
conjunction	-3814 Aug 26 j 19:23	3° Ω 08'38	1°47'54	max. Earth dist.	-3806 Sep 12 j 05:48	20° Ω 31'54	31.29956 AU

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Attention, astronomical year style is used: The year -3806 in astronomical counting style is the year 3807 BCE in historical counting style.

conjunction	-3806 Sep 13 j 00:44	20°033'41	2°05'54	minimum elong	-3798 Sep 30 j 02:23	7°05'58'09	2°12'33
minimum elong	-3806 Sep 13 j 00:44	20°033'41	2°06'00	max. Earth dist.	-3798 Sep 29 j 15:20	7°05'57'06	31.29147 AU
retrograde	-3806 Dec 24 j 03:39	23°000'35		retrograde	-3797 Jan 10 j 14:05	10°02'54'2	
opposition	-3805 Mar 12 j 18:06	21°038'43	2°15'18	opposition	-3797 Mar 30 j 21:43	9°03'03'29	2°21'33
min. Earth dist.	-3805 Mar 13 j 11:30	21°037'32	29.30083 AU	min. Earth dist.	-3797 Mar 31 j 08:54	9°02'02'43	29.29351 AU
direct	-3805 Jun 02 j 00:43	20°014'17		direct	-3797 Jun 19 j 23:18	7°03'39'26	
conjunction	-3805 Sep 15 j 10:23	22°044'30	2°07'22	conjunction	-3797 Oct 02 j 11:26	10°08'08'50	2°12'28
minimum elong	-3805 Sep 15 j 10:22	22°044'30	2°07'29	minimum elong	-3797 Oct 02 j 11:26	10°08'08'50	2°12'32
max. Earth dist.	-3805 Sep 14 j 16:49	22°042'51	31.29849 AU	max. Earth dist.	-3797 Oct 02 j 00:12	10°07'07'46	31.29225 AU
retrograde	-3805 Dec 26 j 14:09	25°011'27		retrograde	-3796 Jan 13 j 02:46	12°03'36'32	
opposition	-3804 Mar 14 j 06:34	23°049'31	2°16'46	opposition	-3796 Apr 01 j 10:24	11°04'17'17	2°21'25
min. Earth dist.	-3804 Mar 15 j 00:18	23°048'19	29.29920 AU	min. Earth dist.	-3796 Apr 01 j 20:15	11°03'13'37	29.29407 AU
direct	-3804 Jun 03 j 14:23	22°025'07		direct	-3796 Jun 21 j 09:46	9°05'50'20	
conjunction	-3804 Sep 16 j 19:38	24°055'13	2°08'40	conjunction	-3796 Oct 03 j 20:34	12°01'19'39	2°12'15
minimum elong	-3804 Sep 16 j 19:38	24°055'13	2°08'45	minimum elong	-3796 Oct 03 j 20:34	12°01'19'39	2°12'18
max. Earth dist.	-3804 Sep 16 j 01:56	24°053'33	31.29649 AU	max. Earth dist.	-3796 Oct 03 j 10:58	12°01'18'45	31.29235 AU
retrograde	-3804 Dec 28 j 02:21	27°022'13		retrograde	-3795 Jan 14 j 14:04	14°04'47'29	
opposition	-3803 Mar 16 j 18:54	26°000'13	2°18'03	opposition	-3795 Apr 03 j 23:22	13°02'55'12	2°21'05
min. Earth dist.	-3803 Mar 17 j 10:57	25°059'08	29.29691 AU	min. Earth dist.	-3795 Apr 04 j 09:19	13°02'24'32	29.29368 AU
direct	-3803 Jun 06 j 03:05	24°035'50		direct	-3795 Jun 23 j 22:04	12°01'01'20	
conjunction	-3803 Sep 19 j 04:57	27°005'49	2°09'46	conjunction	-3795 Oct 06 j 05:43	14°03'30'33	2°11'50
minimum elong	-3803 Sep 19 j 04:57	27°005'49	2°09'52	minimum elong	-3795 Oct 06 j 05:43	14°03'30'33	2°11'54
max. Earth dist.	-3803 Sep 18 j 12:29	27°004'16	31.29402 AU	max. Earth dist.	-3795 Oct 05 j 20:07	14°02'29'39	31.29148 AU
retrograde	-3803 Dec 30 j 11:19	29°032'53		retrograde	-3794 Jan 17 j 02:52	16°05'58'30	
opposition	-3802 Mar 19 j 07:23	28°010'49	2°19'08	opposition	-3794 Apr 06 j 12:06	15°03'36'11	2°20'33
min. Earth dist.	-3802 Mar 19 j 23:41	28°009'42	29.29460 AU	min. Earth dist.	-3794 Apr 06 j 20:25	15°03'35'37	29.29214 AU
direct	-3802 Jun 08 j 14:52	26°046'27		direct	-3794 Jun 26 j 09:39	14°02'12'22	
conjunction	-3802 Sep 21 j 14:03	29°016'18	2°10'41	conjunction	-3794 Oct 08 j 14:56	16°04'41'30	2°11'15
minimum elong	-3802 Sep 21 j 14:03	29°016'18	2°10'46	minimum elong	-3794 Oct 08 j 14:56	16°04'41'30	2°11'17
max. Earth dist.	-3802 Sep 20 j 22:33	29°014'50	31.29194 AU	max. Earth dist.	-3794 Oct 08 j 06:09	16°04'40'41	31.28914 AU
retrograde	-3802 Oct 11 j 04:21	0°00'00		retrograde	-3793 Jan 19 j 13:19	19°09'09'35	
opposition	-3801 Jan 01 j 21:01	1°04'43'25		opposition	-3793 Apr 09 j 01:04	17°04'47'12	2°19'49
min. Earth dist.	-3801 Mar 21 j 19:42	0°02'11'18	2°20'01	min. Earth dist.	-3793 Apr 09 j 09:53	17°04'46'36	29.28907 AU
direct	-3801 Mar 22 j 10:05	0°02'20'19	29.29276 AU	direct	-3793 Jun 28 j 21:28	16°02'23'26	
conjunction	-3801 Apr 04 j 02:01	30°00'00		conjunction	-3793 Oct 11 j 00:06	18°05'52'27	2°10'28
minimum elong	-3801 Jun 11 j 04:03	28°056'58		minimum elong	-3793 Oct 11 j 00:07	18°05'52'27	2°10'30
max. Earth dist.	-3801 Aug 14 j 01:06	0°00'00		max. Earth dist.	-3793 Oct 10 j 16:04	18°05'51'42	31.28538 AU
conjunction	-3801 Sep 23 j 23:09	1°02'26'42	2°11'25	retrograde	-3792 Jan 22 j 00:15	21°02'20'37	
minimum elong	-3801 Sep 23 j 23:09	1°02'26'42	2°11'30	opposition	-3792 Apr 10 j 13:54	19°05'58'10	2°18'53
max. Earth dist.	-3801 Sep 23 j 08:18	1°02'25'18	31.29046 AU	min. Earth dist.	-3792 Apr 10 j 21:08	19°05'57'41	29.28446 AU
retrograde	-3800 Jan 04 j 07:28	3°05'53'55		direct	-3792 Jun 30 j 11:05	18°03'34'26	
opposition	-3800 Mar 23 j 08:07	2°03'11'45	2°20'42	conjunction	-3792 Oct 12 j 09:15	21°03'03'21	2°09'30
min. Earth dist.	-3800 Mar 23 j 22:13	2°03'30'48	29.29188 AU	minimum elong	-3792 Oct 12 j 09:15	21°03'03'21	2°09'32
direct	-3800 Jun 12 j 14:27	1°07'07'28		max. Earth dist.	-3792 Oct 12 j 01:24	21°02'02'36	31.28017 AU
conjunction	-3800 Sep 25 j 08:19	3°03'37'07	2°11'58	retrograde	-3791 Jan 23 j 11:34	23°03'31'37	
minimum elong	-3800 Sep 25 j 08:18	3°03'37'07	2°12'02	opposition	-3791 Apr 13 j 02:56	22°09'09'05	2°17'45
max. Earth dist.	-3800 Sep 24 j 19:10	3°03'35'52	31.29011 AU	min. Earth dist.	-3791 Apr 13 j 10:09	22°08'08'36	29.27880 AU
retrograde	-3799 Jan 05 j 16:47	6°04'04'25		direct	-3791 Jul 02 j 22:15	20°04'45'22	
opposition	-3799 Mar 25 j 20:39	4°04'42'14	2°21'12	conjunction	-3791 Oct 14 j 18:16	23°01'14'09	2°08'21
min. Earth dist.	-3799 Mar 26 j 09:09	4°04'41'23	29.29189 AU	minimum elong	-3791 Oct 14 j 18:16	23°01'14'09	2°08'23
direct	-3799 Jun 15 j 02:59	3°01'18'01		max. Earth dist.	-3791 Oct 14 j 12:04	23°01'13'33	31.27417 AU
conjunction	-3799 Sep 27 j 17:13	5°04'47'34	2°12'20	retrograde	-3790 Jan 25 j 20:50	25°04'42'31	
minimum elong	-3799 Sep 27 j 17:13	5°04'47'34	2°12'24	opposition	-3790 Apr 15 j 15:48	24°01'19'53	2°16'26
max. Earth dist.	-3799 Sep 27 j 04:11	5°04'46'20	31.29056 AU	min. Earth dist.	-3790 Apr 15 j 21:37	24°01'19'30	29.27242 AU
retrograde	-3798 Jan 08 j 04:09	8°01'15'01		direct	-3790 Jul 05 j 11:13	22°05'56'11	
opposition	-3798 Mar 28 j 09:13	6°02'52'48	2°21'28	conjunction	-3790 Oct 17 j 03:13	25°02'24'50	2°07'01
min. Earth dist.	-3798 Mar 28 j 20:53	6°02'52'00	29.29268 AU	minimum elong	-3790 Oct 17 j 03:13	25°02'24'50	2°07'01
direct	-3798 Jun 17 j 12:18	5°02'28'40		max. Earth dist.	-3790 Oct 16 j 20:58	25°02'24'15	31.26779 AU
conjunction	-3798 Sep 30 j 02:23	7°05'58'09	2°12'29	retrograde	-3789 Jan 28 j 07:58	27°05'53'20	

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Attention, astronomical year style is used: The year -3789 in astronomical counting style is the year 3790 BCE in historical counting style.

opposition	-3789 Apr 18 j 04:33	26° $\mathring{\text{N}}$ 30'36	2°14'55	max. Earth dist.	-3782 Nov 03 j 06:14	12° $\mathring{\text{S}}$ 53'08	31.23081 AU
min. Earth dist.	-3789 Apr 18 j 09:30	26° $\mathring{\text{N}}$ 30'16	29.26620 AU	retrograde	-3781 Feb 15 j 05:26	15° $\mathring{\text{S}}$ 22'40	
direct	-3789 Jul 07 j 21:07	25° $\mathring{\text{N}}$ 06'55		opposition	-3781 May 06 j 12:45	13° $\mathring{\text{S}}$ 59'35	1°55'56
				min. Earth dist.	-3781 May 06 j 09:51	13° $\mathring{\text{S}}$ 59'47	29.22846 AU
conjunction	-3789 Oct 19 j 12:16	27° $\mathring{\text{N}}$ 35'28	2°05'30	direct	-3781 Jul 25 j 16:34	12° $\mathring{\text{S}}$ 36'27	
minimum elong	-3789 Oct 19 j 12:17	27° $\mathring{\text{N}}$ 35'28	2°05'31				
max. Earth dist.	-3789 Oct 19 j 08:12	27° $\mathring{\text{N}}$ 35'05	31.26177 AU	conjunction	-3781 Nov 05 j 12:53	15° $\mathring{\text{S}}$ 04'29	1°47'03
	-3788 Jan 15 j 03:23	0° $\mathring{\text{S}}$		minimum elong	-3781 Nov 05 j 12:53	15° $\mathring{\text{S}}$ 04'29	1°47'02
retrograde	-3788 Jan 30 j 17:46	0° $\mathring{\text{S}}$ 04'05		max. Earth dist.	-3781 Nov 05 j 15:05	15° $\mathring{\text{S}}$ 04'42	31.22363 AU
	-3788 Feb 15 j 16:38	30° $\mathring{\text{R}}$		retrograde	-3780 Feb 17 j 17:09	17° $\mathring{\text{S}}$ 34'26	
opposition	-3788 Apr 19 j 17:31	28° $\mathring{\text{N}}$ 41'17	2°13'12	opposition	-3780 May 08 j 02:02	16° $\mathring{\text{S}}$ 11'15	1°52'46
min. Earth dist.	-3788 Apr 19 j 21:33	28° $\mathring{\text{N}}$ 41'01	29.26045 AU	min. Earth dist.	-3780 May 07 j 22:35	16° $\mathring{\text{S}}$ 11'29	29.22055 AU
direct	-3788 Jul 09 j 08:26	27° $\mathring{\text{N}}$ 17'39		direct	-3780 Jul 27 j 03:17	14° $\mathring{\text{S}}$ 48'09	
conjunction	-3788 Oct 20 j 21:03	29° $\mathring{\text{N}}$ 46'06	2°03'49	conjunction	-3780 Nov 06 j 22:14	17° $\mathring{\text{S}}$ 16'05	1°44'01
minimum elong	-3788 Oct 20 j 21:03	29° $\mathring{\text{N}}$ 46'06	2°03'49	minimum elong	-3780 Nov 06 j 22:14	17° $\mathring{\text{S}}$ 16'05	1°43'58
max. Earth dist.	-3788 Oct 20 j 17:14	29° $\mathring{\text{N}}$ 45'44	31.25657 AU	max. Earth dist.	-3780 Nov 07 j 02:11	17° $\mathring{\text{S}}$ 16'28	31.21502 AU
	-3788 Oct 26 j 23:58	0° $\mathring{\text{S}}$		retrograde	-3779 Feb 19 j 03:29	19° $\mathring{\text{S}}$ 46'10	
retrograde	-3787 Feb 01 j 06:26	2° $\mathring{\text{S}}$ 14'53		opposition	-3779 May 10 j 15:19	18° $\mathring{\text{S}}$ 22'53	1°49'26
opposition	-3787 Apr 22 j 06:28	0° $\mathring{\text{S}}$ 52'01	2°11'18	min. Earth dist.	-3779 May 10 j 11:23	18° $\mathring{\text{S}}$ 23'09	29.21117 AU
min. Earth dist.	-3787 Apr 22 j 08:40	0° $\mathring{\text{S}}$ 51'52	29.25568 AU	direct	-3779 Jul 29 j 15:28	16° $\mathring{\text{S}}$ 59'48	
	-3787 May 26 j 21:51	30° $\mathring{\text{R}}$					
direct	-3787 Jul 11 j 18:39	29° $\mathring{\text{N}}$ 28'26		conjunction	-3779 Nov 09 j 07:31	19° $\mathring{\text{S}}$ 27'36	1°40'49
	-3787 Aug 24 j 21:53	0° $\mathring{\text{S}}$		minimum elong	-3779 Nov 09 j 07:31	19° $\mathring{\text{S}}$ 27'36	1°40'47
				max. Earth dist.	-3779 Nov 09 j 11:21	19° $\mathring{\text{S}}$ 27'58	31.20529 AU
conjunction	-3787 Oct 23 j 06:06	1° $\mathring{\text{S}}$ 56'49	2°01'56	retrograde	-3778 Feb 21 j 15:39	21° $\mathring{\text{S}}$ 57'48	
minimum elong	-3787 Oct 23 j 06:06	1° $\mathring{\text{S}}$ 56'49	2°01'57	opposition	-3778 May 13 j 04:18	20° $\mathring{\text{S}}$ 34'25	1°45'56
max. Earth dist.	-3787 Oct 23 j 04:13	1° $\mathring{\text{S}}$ 56'38	31.25217 AU	min. Earth dist.	-3778 May 12 j 23:04	20° $\mathring{\text{S}}$ 34'46	29.20102 AU
retrograde	-3786 Feb 03 j 17:58	4° $\mathring{\text{S}}$ 25'45		direct	-3778 Aug 01 j 02:01	19° $\mathring{\text{S}}$ 11'18	
opposition	-3786 Apr 24 j 19:24	3° $\mathring{\text{S}}$ 02'51	2°09'12				
min. Earth dist.	-3786 Apr 24 j 21:18	3° $\mathring{\text{S}}$ 02'43	29.25160 AU	conjunction	-3778 Nov 11 j 16:50	21° $\mathring{\text{S}}$ 39'01	1°37'29
direct	-3786 Jul 14 j 05:48	1° $\mathring{\text{S}}$ 39'21		minimum elong	-3778 Nov 11 j 16:51	21° $\mathring{\text{S}}$ 39'01	1°37'26
				max. Earth dist.	-3778 Nov 11 j 22:13	21° $\mathring{\text{S}}$ 39'31	31.19487 AU
conjunction	-3786 Oct 25 j 15:02	4° $\mathring{\text{S}}$ 07'41	1°59'53	retrograde	-3777 Feb 24 j 02:24	24° $\mathring{\text{S}}$ 09'20	
minimum elong	-3786 Oct 25 j 15:02	4° $\mathring{\text{S}}$ 07'41	1°59'53	opposition	-3777 May 15 j 17:27	22° $\mathring{\text{S}}$ 45'49	1°42'18
max. Earth dist.	-3786 Oct 25 j 13:41	4° $\mathring{\text{S}}$ 07'33	31.24850 AU	min. Earth dist.	-3777 May 15 j 12:03	22° $\mathring{\text{S}}$ 46'10	29.19051 AU
retrograde	-3785 Feb 06 j 07:09	6° $\mathring{\text{S}}$ 36'47		direct	-3777 Aug 03 j 13:00	21° $\mathring{\text{S}}$ 22'41	
opposition	-3785 Apr 27 j 08:18	5° $\mathring{\text{S}}$ 13'51	2°06'55				
min. Earth dist.	-3785 Apr 27 j 08:07	5° $\mathring{\text{S}}$ 13'52	29.24797 AU	conjunction	-3777 Nov 14 j 01:58	23° $\mathring{\text{S}}$ 50'17	1°34'00
direct	-3785 Jul 16 j 16:19	3° $\mathring{\text{S}}$ 50'26		minimum elong	-3777 Nov 14 j 01:58	23° $\mathring{\text{S}}$ 50'17	1°33'57
				max. Earth dist.	-3777 Nov 14 j 08:04	23° $\mathring{\text{S}}$ 50'52	31.18462 AU
conjunction	-3785 Oct 28 j 00:00	6° $\mathring{\text{S}}$ 18'43	1°57'39	retrograde	-3776 Feb 26 j 14:58	26° $\mathring{\text{S}}$ 20'44	
minimum elong	-3785 Oct 28 j 00:01	6° $\mathring{\text{S}}$ 18'43	1°57'39	opposition	-3776 May 17 j 06:27	24° $\mathring{\text{S}}$ 57'06	1°38'31
max. Earth dist.	-3785 Oct 27 j 23:47	6° $\mathring{\text{S}}$ 18'42	31.24487 AU	min. Earth dist.	-3776 May 16 j 22:52	24° $\mathring{\text{S}}$ 57'37	29.18049 AU
retrograde	-3784 Feb 08 j 18:31	8° $\mathring{\text{S}}$ 48'01		direct	-3776 Aug 04 j 23:28	23° $\mathring{\text{S}}$ 33'58	
opposition	-3784 Apr 28 j 21:27	7° $\mathring{\text{S}}$ 25'03	2°04'26				
min. Earth dist.	-3784 Apr 28 j 21:25	7° $\mathring{\text{S}}$ 25'03	29.24427 AU	conjunction	-3776 Nov 15 j 11:14	26° $\mathring{\text{S}}$ 01'29	1°30'24
direct	-3784 Jul 18 j 03:35	6° $\mathring{\text{S}}$ 01'44		minimum elong	-3776 Nov 15 j 11:14	26° $\mathring{\text{S}}$ 01'29	1°30'20
				max. Earth dist.	-3776 Nov 15 j 18:26	26° $\mathring{\text{S}}$ 02'10	31.17499 AU
conjunction	-3784 Oct 29 j 09:08	8° $\mathring{\text{S}}$ 29'57	1°55'15	retrograde	-3775 Feb 28 j 02:53	28° $\mathring{\text{S}}$ 32'04	
minimum elong	-3784 Oct 29 j 09:08	8° $\mathring{\text{S}}$ 29'57	1°55'14	opposition	-3775 May 19 j 19:33	27° $\mathring{\text{S}}$ 08'20	1°34'35
max. Earth dist.	-3784 Oct 29 j 10:08	8° $\mathring{\text{S}}$ 30'03	31.24111 AU	min. Earth dist.	-3775 May 19 j 11:52	27° $\mathring{\text{S}}$ 08'52	29.17139 AU
retrograde	-3783 Feb 10 j 07:03	10° $\mathring{\text{S}}$ 59'24		direct	-3775 Aug 07 j 10:36	25° $\mathring{\text{S}}$ 45'14	
opposition	-3783 May 01 j 10:31	9° $\mathring{\text{S}}$ 36'25	2°01'47				
min. Earth dist.	-3783 May 01 j 08:42	9° $\mathring{\text{S}}$ 36'32	29.24009 AU	conjunction	-3775 Nov 17 j 20:34	28° $\mathring{\text{S}}$ 12'41	1°26'39
direct	-3783 Jul 20 j 16:48	8° $\mathring{\text{S}}$ 13'11		minimum elong	-3775 Nov 17 j 20:34	28° $\mathring{\text{S}}$ 12'41	1°26'35
				max. Earth dist.	-3775 Nov 18 j 05:22	28° $\mathring{\text{S}}$ 13'31	31.16651 AU
conjunction	-3783 Oct 31 j 18:14	10° $\mathring{\text{S}}$ 41'21	1°52'41		-3774 Jan 09 j 09:18	0° $\mathring{\text{M}}$	
minimum elong	-3783 Oct 31 j 18:14	10° $\mathring{\text{S}}$ 41'21	1°52'40	retrograde	-3774 Mar 02 j 15:48	0° $\mathring{\text{M}}$ 43'24	
max. Earth dist.	-3783 Oct 31 j 19:24	10° $\mathring{\text{S}}$ 41'28	31.23652 AU		-3774 Apr 26 j 09:44	30° $\mathring{\text{R}}$	
retrograde	-3782 Feb 12 j 19:40	13° $\mathring{\text{S}}$ 10'59		opposition	-3774 May 22 j 08:27	29° $\mathring{\text{S}}$ 19'36	1°30'31
opposition	-3782 May 03 j 23:44	11° $\mathring{\text{S}}$ 47'57	1°58'56	min. Earth dist.	-3774 May 21 j 22:40	29° $\mathring{\text{S}}$ 20'16	29.16328 AU
min. Earth dist.	-3782 May 03 j 22:00	11° $\mathring{\text{S}}$ 48'04	29.23500 AU	direct	-3774 Aug 09 j 23:08	27° $\mathring{\text{S}}$ 56'31	
direct	-3782 Jul 23 j 03:51	10° $\mathring{\text{S}}$ 24'46			-3774 Nov 09 j 16:25	0° $\mathring{\text{M}}$	
conjunction	-3782 Nov 03 j 03:36	12° $\mathring{\text{S}}$ 52'53	1°49'57	conjunction	-3774 Nov 20 j 05:50	0° $\mathring{\text{M}}$ 23'56	1°22'47
minimum elong	-3782 Nov 03 j 03:37	12° $\mathring{\text{S}}$ 52'53	1°49'54	minimum elong	-3774 Nov 20 j 05:51	0° $\mathring{\text{M}}$ 23'56	1°22'42

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Attention, astronomical year style is used: The year -3774 in astronomical counting style is the year 3775 BCE in historical counting style.

max. Earth dist.	-3774 Nov 20 j 14:58	0°M24'48	31.15889 AU	max. Earth dist.	-3766 Dec 08 j 03:47	18°M01'12	31.09327 AU
retrograde	-3773 Mar 05 j 04:35	2°M54'50		retrograde	-3765 Mar 23 j 06:59	20°M31'56	
opposition	-3773 May 24 j 21:24	1°M30'58	1°26'18	opposition	-3765 Jun 12 j 05:50	19°M07'37	0°48'32
min. Earth dist.	-3773 May 24 j 11:24	1°M31'39	29.15609 AU	min. Earth dist.	-3765 Jun 11 j 13:38	19°M08'43	29.08786 AU
direct	-3773 Aug 12 j 09:31	0°M07'57		direct	-3765 Aug 30 j 02:39	17°M44'50	
conjunction	-3773 Nov 22 j 15:21	2°M35'19	1°18'47	conjunction	-3765 Dec 09 j 22:04	20°M12'00	0°43'05
minimum elong	-3773 Nov 22 j 15:22	2°M35'20	1°18'43	minimum elong	-3765 Dec 09 j 22:04	20°M12'00	0°42'58
max. Earth dist.	-3773 Nov 23 j 02:27	2°M36'23	31.15212 AU	max. Earth dist.	-3765 Dec 10 j 13:46	20°M13'29	31.08199 AU
retrograde	-3772 Mar 06 j 15:30	5°M06'23		retrograde	-3764 Mar 24 j 20:03	22°M44'20	
opposition	-3772 May 26 j 10:27	3°M42'30	1°21'58	opposition	-3764 Jun 13 j 18:53	21°M19'55	0°43'25
min. Earth dist.	-3772 May 25 j 22:52	3°M43'17	29.14944 AU	min. Earth dist.	-3764 Jun 13 j 02:40	21°M21'01	29.07688 AU
direct	-3772 Aug 13 j 21:57	2°M19'32		direct	-3764 Aug 31 j 12:57	19°M57'06	
conjunction	-3772 Nov 24 j 00:42	4°M46'53	1°14'40	conjunction	-3764 Dec 11 j 08:10	22°M24'14	0°38'16
minimum elong	-3772 Nov 24 j 00:42	4°M46'53	1°14'34	minimum elong	-3764 Dec 11 j 08:10	22°M24'14	0°38'08
max. Earth dist.	-3772 Nov 24 j 11:43	4°M47'56	31.14571 AU	max. Earth dist.	-3764 Dec 12 j 01:46	22°M25'53	31.07135 AU
retrograde	-3771 Mar 09 j 04:23	7°M18'09		retrograde	-3763 Mar 27 j 07:43	24°M56'41	
opposition	-3771 May 28 j 23:35	5°M54'13	1°17'30	opposition	-3763 Jun 16 j 07:43	23°M32'11	0°38'14
min. Earth dist.	-3771 May 28 j 11:20	5°M55'03	29.14307 AU	min. Earth dist.	-3763 Jun 15 j 14:01	23°M33'23	29.06661 AU
direct	-3771 Aug 16 j 08:27	4°M31'20		direct	-3763 Sep 03 j 01:51	22°M09'22	
conjunction	-3771 Nov 26 j 10:29	6°M58'40	1°10'26	conjunction	-3763 Dec 13 j 18:18	24°M36'28	0°33'23
minimum elong	-3771 Nov 26 j 10:29	6°M58'40	1°10'21	minimum elong	-3763 Dec 13 j 18:18	24°M36'28	0°33'16
max. Earth dist.	-3771 Nov 26 j 23:20	6°M59'53	31.13921 AU	max. Earth dist.	-3763 Dec 14 j 11:43	24°M38'07	31.06166 AU
retrograde	-3770 Mar 11 j 15:33	9°M30'06		retrograde	-3762 Mar 29 j 21:35	27°M09'03	
opposition	-3770 May 31 j 12:32	8°M06'09	1°12'55	opposition	-3762 Jun 18 j 20:25	25°M44'29	0°32'59
min. Earth dist.	-3770 May 30 j 23:53	8°M07'00	29.13626 AU	min. Earth dist.	-3762 Jun 18 j 02:04	25°M45'44	29.05753 AU
direct	-3770 Aug 18 j 20:10	6°M43'19		direct	-3762 Sep 05 j 13:02	24°M21'40	
conjunction	-3770 Nov 28 j 20:13	9°M10'39	1°06'05	conjunction	-3762 Dec 16 j 04:36	26°M48'46	0°28'28
minimum elong	-3770 Nov 28 j 20:14	9°M10'39	1°05'59	minimum elong	-3762 Dec 16 j 04:36	26°M48'46	0°28'20
max. Earth dist.	-3770 Nov 29 j 08:53	9°M11'51	31.13217 AU	max. Earth dist.	-3762 Dec 16 j 23:56	26°M50'36	31.05309 AU
retrograde	-3769 Mar 14 j 04:24	11°M42'16		retrograde	-3761 Apr 01 j 08:56	29°M21'30	
min. Earth dist.	-3769 Jun 02 j 11:52	10°M19'13	29.12875 AU	opposition	-3761 Jun 21 j 09:13	27°M56'52	0°27'41
opposition	-3769 Jun 03 j 01:37	10°M18'17	1°08'13	min. Earth dist.	-3761 Jun 20 j 14:10	27°M58'10	29.04947 AU
direct	-3769 Aug 21 j 06:20	8°M55'30		direct	-3761 Sep 08 j 01:02	26°M34'06	
conjunction	-3769 Dec 01 j 06:03	11°M22'48	1°01'39	conjunction	-3761 Dec 18 j 14:44	29°M01'11	0°23'29
minimum elong	-3769 Dec 01 j 06:04	11°M22'48	1°01'34	minimum elong	-3761 Dec 18 j 14:44	29°M01'11	0°23'22
max. Earth dist.	-3769 Dec 01 j 19:52	11°M24'07	31.12404 AU	max. Earth dist.	-3761 Dec 19 j 10:12	29°M03'01	31.04565 AU
retrograde	-3768 Mar 15 j 15:40	13°M54'37			-3760 Jan 14 j 03:43	0° 27	
opposition	-3768 Jun 04 j 14:52	12°M30'33	1°03'26	retrograde	-3760 Apr 02 j 21:35	1° 27 34'03	
min. Earth dist.	-3768 Jun 04 j 01:19	12°M31'29	29.12001 AU	opposition	-3760 Jun 22 j 22:04	0° 27 09'24	0°22'21
direct	-3768 Aug 22 j 16:53	11°M07'48		min. Earth dist.	-3760 Jun 22 j 01:45	0° 27 10'47	29.04248 AU
conjunction	-3768 Dec 02 j 16:04	13°M35'05	0°57'08		-3760 Jun 28 j 15:53	30° 27 M	
minimum elong	-3768 Dec 02 j 16:04	13°M35'05	0°57'02	direct	-3760 Sep 09 j 11:25	28° 27 M46'39	
max. Earth dist.	-3768 Dec 03 j 06:07	13°M36'25	31.11484 AU		-3760 Nov 16 j 02:45	0° 27	
	-3767 Jan 11 j 06:09	15°M		conjunction	-3760 Dec 20 j 01:13	1° 27 13'45	0°18'28
retrograde	-3767 Mar 18 j 04:58	16°M07'02		minimum elong	-3760 Dec 20 j 01:13	1° 27 13'45	0°18'21
	-3767 May 27 j 14:35	15° 27 M		max. Earth dist.	-3760 Dec 20 j 21:57	1° 27 15'42	31.03893 AU
opposition	-3767 Jun 07 j 03:53	14°M42'55	0°58'33	retrograde	-3759 Apr 05 j 08:45	3° 27 46'47	
min. Earth dist.	-3767 Jun 06 j 12:47	14°M43'57	29.11013 AU	opposition	-3759 Jun 25 j 10:51	2° 27 22'05	0°16'58
direct	-3767 Aug 25 j 02:59	13°M20'10		min. Earth dist.	-3759 Jun 24 j 14:42	2° 27 23'28	29.03602 AU
	-3767 Nov 13 j 21:22	15°M		direct	-3759 Sep 11 j 21:50	0° 27 59'23	
conjunction	-3767 Dec 05 j 02:04	15°M47'25	0°52'31	conjunction	-3759 Dec 22 j 11:49	3° 27 26'30	0°13'26
minimum elong	-3767 Dec 05 j 02:04	15°M47'25	0°52'25	minimum elong	-3759 Dec 22 j 11:49	3° 27 26'30	0°13'18
max. Earth dist.	-3767 Dec 05 j 16:30	15°M48'47	31.10439 AU	behind sun begin	-3759 Dec 22 j 08:02	3° 27 26'10	
retrograde	-3766 Mar 20 j 17:27	18°M19'31		behind sun end	-3759 Dec 22 j 15:36	3° 27 26'51	
opposition	-3766 Jun 09 j 17:01	16°M55'17	0°53'34	max. Earth dist.	-3759 Dec 23 j 08:58	3° 27 28'30	31.03271 AU
min. Earth dist.	-3766 Jun 09 j 02:26	16°M56'17	29.09923 AU	retrograde	-3758 Apr 07 j 22:30	5° 27 59'41	
direct	-3766 Aug 27 j 14:12	15°M32'32		opposition	-3758 Jun 27 j 23:33	4° 27 34'59	0°11'32
conjunction	-3766 Dec 07 j 12:07	17°M59'44	0°47'50	min. Earth dist.	-3758 Jun 27 j 01:58	4° 27 36'27	29.02973 AU
minimum elong	-3766 Dec 07 j 12:07	17°M59'44	0°47'43	direct	-3758 Sep 14 j 08:04	3° 27 12'18	

Attention, astronomical year style is used: The year -3758 in astronomical counting style is the year 3759 BCE in historical counting style.

conjunction	-3758 Dec 24 j 22:30	5°♂39'27	0°08'22	conjunction	-3750 Jan 09 j 04:55	21°♂12'19	0°-27'-12
minimum elong	-3758 Dec 24 j 22:30	5°♂39'27	0°08'13	minimum elong	-3750 Jan 09 j 04:55	21°♂12'19	0°27'22
behind sun begin	-3758 Dec 24 j 16:47	5°♂38'56		max. Earth dist.	-3750 Jan 10 j 04:55	21°♂14'35	30.95967 AU
behind sun end	-3758 Dec 25 j 04:14	5°♂39'58		retrograde	-3750 Apr 26 j 06:34	23°♂46'21	
max. Earth dist.	-3758 Dec 25 j 19:53	5°♂41'28	31.02617 AU	min. Earth dist.	-3750 Jul 15 j 06:11	22°♂22'45	28.95545 AU
retrograde	-3757 Apr 10 j 10:44	8°♂12'47		opposition	-3750 Jul 16 j 04:54	22°♂21'10	0°-31'-48
opposition	-3757 Jun 30 j 12:24	6°♂48'03	0°06'06	direct	-3750 Oct 02 j 02:51	20°♂58'19	
min. Earth dist.	-3757 Jun 29 j 15:34	6°♂49'29	29.02299 AU				
direct	-3757 Sep 16 j 18:23	5°♂25'24		conjunction	-3749 Jan 11 j 16:18	23°♂25'39	0°-32'-10
				minimum elong	-3749 Jan 11 j 16:17	23°♂25'39	0°32'21
conjunction	-3757 Dec 27 j 09:31	7°♂52'34	0°03'18	max. Earth dist.	-3749 Jan 12 j 16:41	23°♂27'57	30.95079 AU
minimum elong	-3757 Dec 27 j 09:31	7°♂52'34	0°03'09	retrograde	-3749 Apr 28 j 20:11	25°♂59'46	
behind sun begin	-3757 Dec 27 j 03:06	7°♂52'00		opposition	-3749 Jul 18 j 17:14	24°♂34'34	0°-37'-6
behind sun end	-3757 Dec 27 j 15:55	7°♂53'09		min. Earth dist.	-3749 Jul 17 j 17:03	24°♂36'14	28.94717 AU
max. Earth dist.	-3757 Dec 28 j 07:50	7°♂54'41	31.01911 AU	direct	-3749 Oct 04 j 13:27	23°♂11'42	
retrograde	-3756 Apr 12 j 00:25	10°♂26'02		conjunction	-3748 Jan 14 j 03:49	25°♂39'05	0°-37'-6
min. Earth dist.	-3756 Jul 01 j 03:08	9°♂02'47	29.01542 AU	minimum elong	-3748 Jan 14 j 03:49	25°♂39'05	0°37'16
opposition	-3756 Jul 02 j 01:10	9°♂01'16	0°00'39	max. Earth dist.	-3748 Jan 15 j 04:27	25°♂41'24	30.94300 AU
desc. node	-3756 Aug 14 j 16:54	7°♂58'00		retrograde	-3748 Apr 30 j 07:45	28°♂13'19	
direct	-3756 Sep 18 j 05:56	7°♂38'37		min. Earth dist.	-3748 Jul 19 j 06:07	26°♂49'44	28.94005 AU
				opposition	-3748 Jul 20 j 05:41	26°♂48'06	0°-42'-20
conjunction	-3756 Dec 28 j 20:30	10°♂05'50	0°-1'-56	direct	-3748 Oct 05 j 23:29	25°♂25'14	
minimum elong	-3756 Dec 28 j 20:31	10°♂05'50	0°02'05				
behind sun begin	-3756 Dec 28 j 14:04	10°♂05'15		conjunction	-3747 Jan 15 j 15:33	27°♂52'41	0°-41'-59
behind sun end	-3756 Dec 29 j 02:58	10°♂06'25		minimum elong	-3747 Jan 15 j 15:33	27°♂52'41	0°42'09
max. Earth dist.	-3756 Dec 29 j 18:10	10°♂07'52	31.01094 AU	max. Earth dist.	-3747 Jan 16 j 17:15	27°♂55'06	30.93642 AU
retrograde	-3755 Apr 14 j 14:12	12°♂39'25			-3747 Mar 22 j 17:28	0°♂	
opposition	-3755 Jul 04 j 14:06	11°♂14'36	0°-4'-47	retrograde	-3747 May 02 j 21:05	0°♂27'02	
min. Earth dist.	-3755 Jul 03 j 16:49	11°♂16'04	29.00669 AU		-3747 Jun 14 j 03:19	30°♂	
direct	-3755 Sep 20 j 15:55	9°♂51'56		opposition	-3747 Jul 22 j 17:58	29°♂01'48	0°-47'-32
				min. Earth dist.	-3747 Jul 21 j 17:10	29°♂03'31	28.93385 AU
conjunction	-3755 Dec 31 j 07:52	12°♂19'09	0°-7'-1	direct	-3747 Oct 08 j 10:18	27°♂38'56	
minimum elong	-3755 Dec 31 j 07:51	12°♂19'09	0°07'11		-3746 Jan 15 j 06:40	0°♂	
behind sun begin	-3755 Dec 31 j 01:54	12°♂18'37		conjunction	-3746 Jan 18 j 03:21	0°♂06'29	0°-46'-48
behind sun end	-3755 Dec 31 j 13:48	12°♂19'42		minimum elong	-3746 Jan 18 j 03:20	0°♂06'29	0°46'58
max. Earth dist.	-3754 Jan 01 j 06:35	12°♂21'18	31.00157 AU	max. Earth dist.	-3746 Jan 19 j 04:27	0°♂08'51	30.93048 AU
retrograde	-3754 Apr 17 j 03:08	14°♂52'50		retrograde	-3746 May 05 j 10:46	2°♂40'57	
min. Earth dist.	-3754 Jul 06 j 04:40	13°♂29'28	28.99668 AU	min. Earth dist.	-3746 Jul 24 j 06:14	1°♂17'23	28.92824 AU
opposition	-3754 Jul 07 j 02:39	13°♂27'57	0°-10'-14	opposition	-3746 Jul 25 j 06:15	1°♂15'43	0°-52'-39
direct	-3754 Sep 23 j 04:58	12°♂05'15			-3746 Sep 20 j 09:41	30°♂	
				direct	-3746 Oct 10 j 19:19	29°♂52'51	
conjunction	-3753 Jan 02 j 19:00	14°♂32'29	0°-12'-6		-3746 Oct 31 j 03:27	0°♂	
minimum elong	-3753 Jan 02 j 19:00	14°♂32'29	0°12'15	conjunction	-3745 Jan 20 j 15:25	2°♂20'30	0°-51'-33
behind sun begin	-3753 Jan 02 j 14:40	14°♂32'06		minimum elong	-3745 Jan 20 j 15:25	2°♂20'30	0°51'43
behind sun end	-3753 Jan 02 j 23:20	14°♂32'53		max. Earth dist.	-3745 Jan 21 j 17:41	2°♂22'59	30.92494 AU
max. Earth dist.	-3753 Jan 03 j 16:53	14°♂34'33	30.99118 AU	retrograde	-3745 May 08 j 00:28	4°♂55'04	
retrograde	-3753 Apr 19 j 17:59	17°♂06'15		opposition	-3745 Jul 27 j 18:31	3°♂29'51	0°-57'-41
opposition	-3753 Jul 09 j 15:24	15°♂41'17	0°-15'-40	min. Earth dist.	-3745 Jul 26 j 17:53	3°♂31'34	28.92268 AU
min. Earth dist.	-3753 Jul 08 j 17:24	15°♂42'48	28.98604 AU	direct	-3745 Oct 13 j 08:01	2°♂07'00	
direct	-3753 Sep 25 j 16:24	14°♂18'32					
				conjunction	-3744 Jan 23 j 03:24	4°♂34'44	0°-56'-14
conjunction	-3752 Jan 05 j 06:12	16°♂45'47	0°-17'-9	minimum elong	-3744 Jan 23 j 03:24	4°♂34'44	0°56'24
minimum elong	-3752 Jan 05 j 06:12	16°♂45'47	0°17'19	max. Earth dist.	-3744 Jan 24 j 04:35	4°♂37'06	30.91923 AU
max. Earth dist.	-3752 Jan 06 j 05:31	16°♂47'59	30.98031 AU	retrograde	-3744 May 09 j 16:08	7°♂09'24	
retrograde	-3752 Apr 21 j 05:35	19°♂19'38		min. Earth dist.	-3744 Jul 28 j 06:42	5°♂45'51	28.91678 AU
min. Earth dist.	-3752 Jul 10 j 05:49	17°♂56'07	28.97518 AU	opposition	-3744 Jul 29 j 06:54	5°♂44'10	-1°-2'-39
opposition	-3752 Jul 11 j 04:02	17°♂54'35	0°-21'-5	direct	-3744 Oct 14 j 19:11	4°♂21'18	
direct	-3752 Sep 27 j 04:52	16°♂31'48					
				conjunction	-3743 Jan 24 j 15:53	6°♂49'07	-1°00'-50
conjunction	-3751 Jan 06 j 17:29	18°♂59'03	0°-22'-11	minimum elong	-3743 Jan 24 j 15:53	6°♂49'07	1°00'59
minimum elong	-3751 Jan 06 j 17:29	18°♂59'03	0°22'21	max. Earth dist.	-3743 Jan 25 j 17:53	6°♂51'34	30.91277 AU
max. Earth dist.	-3751 Jan 07 j 16:33	19°♂01'14	30.96968 AU	retrograde	-3743 May 12 j 04:23	9°♂23'51	
retrograde	-3751 Apr 23 j 19:01	21°♂32'59		opposition	-3743 Jul 31 j 19:04	7°♂58'37	-1°-7'-31
opposition	-3751 Jul 13 j 16:25	20°♂07'52	0°-26'-27	min. Earth dist.	-3743 Jul 30 j 19:16	8°♂00'16	28.90985 AU
min. Earth dist.	-3751 Jul 12 j 17:26	20°♂09'27	28.96492 AU				
direct	-3751 Sep 29 j 15:51	18°♂45'02					

Attention, astronomical year style is used: The year -3743 in astronomical counting style is the year 3744 BCE in historical counting style.

direct	-3743 Oct 17 j 07:13	6° $\overline{35}$ '42		minimum elong	-3734 Feb 14 j 10:18	26° $\overline{57}$ '47	1°37'27
				max. Earth dist.	-3734 Feb 15 j 11:43	27° $\overline{00}$ '10	30.84882 AU
conjunction	-3742 Jan 27 j 04:23	9° $\overline{03}$ '36	-1°-5'-20	retrograde	-3734 Jun 02 j 01:46	29° $\overline{32}$ '40	
minimum elong	-3742 Jan 27 j 04:23	9° $\overline{03}$ '36	1°05'30	min. Earth dist.	-3734 Aug 20 j 07:17	28° $\overline{08}$ '45	28.84875 AU
max. Earth dist.	-3742 Jan 28 j 05:16	9° $\overline{05}$ '57	30.90534 AU	opposition	-3734 Aug 21 j 06:06	28° $\overline{07}$ '09	-1°-45'-55
retrograde	-3742 May 14 j 19:28	11° $\overline{38}$ '22		direct	-3734 Nov 06 j 12:48	26° $\overline{43}$ '44	
min. Earth dist.	-3742 Aug 02 j 07:25	10° $\overline{14}$ '46	28.90192 AU				
opposition	-3742 Aug 03 j 07:18	10° $\overline{13}$ '06	-1°-12'-17	conjunction	-3733 Feb 16 j 23:17	29° $\overline{12}$ '17	-1°-40'-41
direct	-3742 Oct 19 j 19:08	8° $\overline{50}$ '08		minimum elong	-3733 Feb 16 j 23:16	29° $\overline{12}$ '17	1°40'50
				max. Earth dist.	-3733 Feb 17 j 23:45	29° $\overline{14}$ '35	30.84660 AU
conjunction	-3741 Jan 29 j 16:49	11° $\overline{18}$ '05	-1°-9'-45		-3733 Mar 10 j 10:48	0° \approx	
minimum elong	-3741 Jan 29 j 16:48	11° $\overline{18}$ '05	1°09'55	retrograde	-3733 Jun 04 j 17:25	1° \approx 47'13	
max. Earth dist.	-3741 Jan 30 j 17:59	11° $\overline{20}$ '27	30.89678 AU	opposition	-3733 Aug 23 j 17:47	0° \approx 21'44	-1°-49'-28
retrograde	-3741 May 17 j 08:04	13° $\overline{52}$ '53		min. Earth dist.	-3733 Aug 22 j 18:53	0° \approx 23'21	28.84691 AU
opposition	-3741 Aug 05 j 19:32	12° $\overline{27}$ '32	-1°-16'-56		-3733 Sep 05 j 18:24	30° \overline{R} $\overline{3}$	
min. Earth dist.	-3741 Aug 04 j 20:35	12° $\overline{29}$ '08	28.89304 AU	direct	-3733 Nov 09 j 00:29	28° $\overline{58}$ '19	
direct	-3741 Oct 22 j 07:21	11° $\overline{04}$ '31			-3732 Jan 09 j 11:33	0° \approx	
conjunction	-3740 Feb 01 j 05:26	13° $\overline{32}$ '29	-1°-14'-3	conjunction	-3732 Feb 19 j 12:40	1° \approx 27'01	-1°-43'-56
minimum elong	-3740 Feb 01 j 05:25	13° $\overline{32}$ '29	1°14'13	minimum elong	-3732 Feb 19 j 12:40	1° \approx 27'01	1°44'05
max. Earth dist.	-3740 Feb 02 j 06:15	13° $\overline{34}$ '50	30.88776 AU	max. Earth dist.	-3732 Feb 20 j 13:25	1° \approx 29'20	30.84478 AU
retrograde	-3740 May 18 j 21:36	16° $\overline{07}$ '18		retrograde	-3732 Jun 06 j 06:45	4° \approx 01'58	
min. Earth dist.	-3740 Aug 06 j 07:48	14° $\overline{43}$ '33	28.88397 AU	min. Earth dist.	-3732 Aug 24 j 07:46	2° \approx 38'04	28.84519 AU
opposition	-3740 Aug 07 j 07:29	14° $\overline{41}$ '53	-1°-21'-29	opposition	-3732 Aug 25 j 05:25	2° \approx 36'33	-1°-52'-51
direct	-3740 Oct 23 j 19:15	13° $\overline{18}$ '46		direct	-3732 Nov 10 j 12:20	1° \approx 13'07	
conjunction	-3739 Feb 02 j 18:02	15° $\overline{46}$ '47	-1°-18'-14	conjunction	-3731 Feb 21 j 02:16	3° \approx 41'57	-1°-47'-1
minimum elong	-3739 Feb 02 j 18:02	15° $\overline{46}$ '47	1°18'24	minimum elong	-3731 Feb 21 j 02:16	3° \approx 41'57	1°47'10
max. Earth dist.	-3739 Feb 03 j 18:35	15° $\overline{49}$ '06	30.87862 AU	max. Earth dist.	-3731 Feb 22 j 02:07	3° \approx 44'11	30.84296 AU
retrograde	-3739 May 21 j 08:42	18° $\overline{21}$ '36		retrograde	-3731 Jun 08 j 21:19	6° \approx 16'56	
opposition	-3739 Aug 09 j 19:30	16° $\overline{56}$ '08	-1°-25'-54	opposition	-3731 Aug 27 j 17:02	4° \approx 51'33	-1°-56'-4
min. Earth dist.	-3739 Aug 08 j 20:55	16° $\overline{57}$ '43	28.87515 AU	min. Earth dist.	-3731 Aug 26 j 19:05	4° \approx 53'05	28.84310 AU
direct	-3739 Oct 26 j 05:47	15° $\overline{32}$ '55		direct	-3731 Nov 13 j 00:22	3° \approx 28'05	
conjunction	-3738 Feb 05 j 06:48	18° $\overline{00}$ '59	-1°-22'-18	conjunction	-3730 Feb 23 j 15:54	5° \approx 57'03	-1°-49'-57
minimum elong	-3738 Feb 05 j 06:48	18° $\overline{00}$ '59	1°22'28	minimum elong	-3730 Feb 23 j 15:54	5° \approx 57'02	1°50'05
max. Earth dist.	-3738 Feb 06 j 07:58	18° $\overline{03}$ '22	30.87014 AU	max. Earth dist.	-3730 Feb 24 j 14:52	5° \approx 59'12	30.84030 AU
retrograde	-3738 May 23 j 21:34	20° $\overline{35}$ '47		retrograde	-3730 Jun 11 j 09:32	8° \approx 32'02	
min. Earth dist.	-3738 Aug 11 j 07:39	19° $\overline{11}$ '56	28.86717 AU	min. Earth dist.	-3730 Aug 29 j 08:24	7° \approx 08'06	28.84011 AU
opposition	-3738 Aug 12 j 07:11	19° $\overline{10}$ '17	-1°-30'-11	opposition	-3730 Aug 30 j 04:43	7° \approx 06'40	-1°-59'-6
direct	-3738 Oct 28 j 17:06	17° $\overline{47}$ '00		direct	-3730 Nov 15 j 11:00	5° \approx 43'11	
conjunction	-3737 Feb 07 j 19:27	20° $\overline{15}$ '08	-1°-26'-15	conjunction	-3729 Feb 26 j 05:42	8° \approx 12'14	-1°-52'-43
minimum elong	-3737 Feb 07 j 19:27	20° $\overline{15}$ '08	1°26'25	minimum elong	-3729 Feb 26 j 05:42	8° \approx 12'14	1°52'51
max. Earth dist.	-3737 Feb 08 j 19:53	20° $\overline{17}$ '26	30.86267 AU	max. Earth dist.	-3729 Feb 27 j 04:26	8° \approx 14'22	30.83693 AU
retrograde	-3737 May 26 j 10:08	22° $\overline{49}$ '57		retrograde	-3729 Jun 13 j 23:40	10° \approx 47'11	
opposition	-3737 Aug 14 j 19:04	21° $\overline{24}$ '24	-1°-34'-20	opposition	-3729 Sep 01 j 16:12	9° \approx 21'50	-2°-1'-58
min. Earth dist.	-3737 Aug 13 j 20:21	21° $\overline{25}$ '59	28.86053 AU	min. Earth dist.	-3729 Aug 31 j 19:36	9° \approx 23'17	28.83631 AU
direct	-3737 Oct 31 j 02:30	20° $\overline{01}$ '03		direct	-3729 Nov 17 j 22:35	7° \approx 58'17	
conjunction	-3736 Feb 10 j 08:16	22° $\overline{29}$ '16	-1°-30'-4	conjunction	-3728 Feb 28 j 19:21	10° \approx 27'25	-1°-55'-18
minimum elong	-3736 Feb 10 j 08:16	22° $\overline{29}$ '16	1°30'13	minimum elong	-3728 Feb 28 j 19:21	10° \approx 27'25	1°55'26
max. Earth dist.	-3736 Feb 11 j 09:49	22° $\overline{31}$ '40	30.85667 AU	max. Earth dist.	-3728 Feb 29 j 16:39	10° \approx 29'26	30.83277 AU
retrograde	-3736 May 27 j 22:41	25° $\overline{04}$ '06		retrograde	-3728 Jun 15 j 11:24	13° \approx 02'21	
min. Earth dist.	-3736 Aug 15 j 07:25	23° $\overline{40}$ '10	28.85525 AU	min. Earth dist.	-3728 Sep 02 j 08:44	11° \approx 38'19	28.83202 AU
opposition	-3736 Aug 16 j 06:47	23° $\overline{38}$ '32	-1°-38'-21	opposition	-3728 Sep 03 j 03:48	11° \approx 36'59	-2°-4'-38
direct	-3736 Nov 01 j 14:57	22° $\overline{15}$ '09		direct	-3728 Nov 19 j 08:32	10° \approx 13'21	
conjunction	-3735 Feb 11 j 21:10	24° $\overline{43}$ '27	-1°-33'-45	conjunction	-3727 Mar 02 j 09:19	12° \approx 42'34	-1°-57'-43
minimum elong	-3735 Feb 11 j 21:10	24° $\overline{43}$ '27	1°33'54	minimum elong	-3727 Mar 02 j 09:19	12° \approx 42'34	1°57'50
max. Earth dist.	-3735 Feb 12 j 21:35	24° $\overline{45}$ '45	30.85210 AU	max. Earth dist.	-3727 Mar 03 j 06:59	12° \approx 44'36	30.82835 AU
retrograde	-3735 May 30 j 13:10	27° $\overline{18}$ '19			-3727 May 16 j 06:47	15° \approx	
opposition	-3735 Aug 18 j 18:25	25° $\overline{52}$ '46	-1°-42'-12	retrograde	-3727 Jun 17 j 22:59	15° \approx 17'25	
min. Earth dist.	-3735 Aug 17 j 19:24	25° $\overline{54}$ '23	28.85147 AU		-3727 Jul 21 j 02:22	15° \overline{R} \approx	
direct	-3735 Nov 04 j 01:17	24° $\overline{29}$ '21		opposition	-3727 Sep 05 j 14:58	13° \approx 52'02	-2°-7'-7
				min. Earth dist.	-3727 Sep 04 j 19:54	13° \approx 53'23	28.82763 AU
conjunction	-3734 Feb 14 j 10:18	26° $\overline{57}$ '47	-1°-37'-18	direct	-3727 Nov 21 j 21:12	12° \approx 28'19	

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Attention, astronomical year style is used: The year -3726 in astronomical counting style is the year 3727 BCE in historical counting style.

conjunction	-3726 Mar 04 j 23:04	14° \approx 57'37	-1°-59'-57	min. Earth dist.	-3719 Sep 22 j 17:51	1° \approx 52'48	28.82983 AU
minimum elong	-3726 Mar 04 j 23:04	14° \approx 57'37	2°00'05	direct	-3719 Dec 09 j 17:32	0° \approx 27'44	
max. Earth dist.	-3726 Mar 05 j 19:05	14° \approx 59'30	30.82418 AU				
	-3726 Mar 06 j 00:30	15° \approx		conjunction	-3718 Mar 23 j 16:12	2° \approx 57'54	-2°-11'00
retrograde	-3726 Jun 20 j 12:17	17° \approx 32'24		minimum elong	-3718 Mar 23 j 16:12	2° \approx 57'54	2°11'05
min. Earth dist.	-3726 Sep 07 j 07:57	16° \approx 08'18	28.82391 AU	max. Earth dist.	-3718 Mar 24 j 08:33	2° \approx 59'26	30.82940 AU
opposition	-3726 Sep 08 j 02:19	16° \approx 07'00	-2°-9'-25	retrograde	-3718 Jul 08 j 21:31	5° \approx 32'09	
	-3726 Oct 23 j 17:31	15° \approx		opposition	-3718 Sep 25 j 19:06	4° \approx 07'07	-2°-20'-22
direct	-3726 Nov 24 j 07:26	14° \approx 43'12		min. Earth dist.	-3718 Sep 25 j 05:16	4° \approx 08'06	28.83209 AU
	-3726 Dec 25 j 14:06	15° \approx		direct	-3718 Dec 12 j 05:56	2° \approx 43'01	
conjunction	-3725 Mar 07 j 12:52	17° \approx 12'35	-2°-2'00	conjunction	-3717 Mar 26 j 06:34	5° \approx 13'18	-2°-11'-29
minimum elong	-3725 Mar 07 j 12:52	17° \approx 12'35	2°02'07	minimum elong	-3717 Mar 26 j 06:34	5° \approx 13'18	2°11'33
max. Earth dist.	-3725 Mar 08 j 09:37	17° \approx 14'31	30.82080 AU	max. Earth dist.	-3717 Mar 26 j 20:40	5° \approx 14'37	30.83122 AU
retrograde	-3725 Jun 23 j 00:12	19° \approx 47'18		retrograde	-3717 Jul 11 j 10:42	7° \approx 47'28	
opposition	-3725 Sep 10 j 13:33	18° \approx 21'54	-2°-11'-30	opposition	-3717 Sep 28 j 06:15	6° \approx 22'27	-2°-20'-47
min. Earth dist.	-3725 Sep 09 j 19:34	18° \approx 23'10	28.82109 AU	min. Earth dist.	-3717 Sep 27 j 17:41	6° \approx 23'21	28.83348 AU
direct	-3725 Nov 26 j 19:03	16° \approx 58'01		direct	-3717 Dec 14 j 16:09	4° \approx 58'18	
conjunction	-3724 Mar 09 j 02:44	19° \approx 27'29	-2°-3'-52	conjunction	-3716 Mar 27 j 21:20	7° \approx 28'40	-2°-11'-47
minimum elong	-3724 Mar 09 j 02:44	19° \approx 27'29	2°03'59	minimum elong	-3716 Mar 27 j 21:20	7° \approx 28'40	2°11'52
max. Earth dist.	-3724 Mar 09 j 22:10	19° \approx 29'18	30.81868 AU	max. Earth dist.	-3716 Mar 28 j 11:21	7° \approx 29'59	30.83210 AU
retrograde	-3724 Jun 24 j 14:51	22° \approx 02'08		retrograde	-3716 Jul 12 j 22:03	10° \approx 02'43	
min. Earth dist.	-3724 Sep 11 j 06:42	20° \approx 38'00	28.81975 AU	opposition	-3716 Sep 29 j 17:10	8° \approx 37'45	-2°-21'00
opposition	-3724 Sep 12 j 00:37	20° \approx 36'44	-2°-13'-24	min. Earth dist.	-3716 Sep 29 j 05:41	8° \approx 38'34	28.83387 AU
direct	-3724 Nov 28 j 07:25	19° \approx 12'47		direct	-3716 Dec 16 j 04:12	7° \approx 13'31	
conjunction	-3723 Mar 11 j 16:49	21° \approx 42'22	-2°-5'-32	conjunction	-3715 Mar 30 j 11:57	9° \approx 43'59	-2°-11'-52
minimum elong	-3723 Mar 11 j 16:49	21° \approx 42'22	2°05'39	minimum elong	-3715 Mar 30 j 11:57	9° \approx 43'59	2°11'56
max. Earth dist.	-3723 Mar 12 j 12:33	21° \approx 44'13	30.81792 AU	max. Earth dist.	-3715 Mar 30 j 23:50	9° \approx 45'05	30.83229 AU
retrograde	-3723 Jun 27 j 03:08	24° \approx 16'56		retrograde	-3715 Jul 15 j 11:37	12° \approx 17'54	
opposition	-3723 Sep 14 j 11:49	22° \approx 51'34	-2°-15'-5	opposition	-3715 Oct 02 j 04:05	10° \approx 52'57	-2°-20'-59
min. Earth dist.	-3723 Sep 13 j 18:58	22° \approx 52'46	28.81974 AU	min. Earth dist.	-3715 Oct 01 j 17:11	10° \approx 53'43	28.83386 AU
direct	-3723 Nov 30 j 19:43	21° \approx 27'35		direct	-3715 Dec 18 j 16:41	9° \approx 28'37	
conjunction	-3722 Mar 14 j 06:47	23° \approx 57'16	-2°-7'-1	conjunction	-3714 Apr 02 j 02:29	11° \approx 59'10	-2°-11'-46
minimum elong	-3722 Mar 14 j 06:47	23° \approx 57'16	2°07'09	minimum elong	-3714 Apr 02 j 02:29	11° \approx 59'10	2°11'51
max. Earth dist.	-3722 Mar 15 j 01:40	23° \approx 59'02	30.81869 AU	max. Earth dist.	-3714 Apr 02 j 14:18	12° \approx 00'16	30.83211 AU
retrograde	-3722 Jun 29 j 17:36	26° \approx 31'47		retrograde	-3714 Jul 17 j 22:54	14° \approx 32'57	
opposition	-3722 Sep 16 j 22:50	25° \approx 06'28	-2°-16'-34	opposition	-3714 Oct 04 j 14:58	13° \approx 08'01	-2°-20'-46
min. Earth dist.	-3722 Sep 16 j 05:30	25° \approx 07'41	28.82119 AU	min. Earth dist.	-3714 Oct 04 j 05:34	13° \approx 08'41	28.83374 AU
direct	-3722 Dec 03 j 07:58	23° \approx 42'26		direct	-3714 Dec 21 j 05:09	11° \approx 43'37	
conjunction	-3721 Mar 16 j 20:53	26° \approx 12'15	-2°-8'-19	conjunction	-3713 Apr 04 j 16:58	14° \approx 14'14	-2°-11'-28
minimum elong	-3721 Mar 16 j 20:53	26° \approx 12'15	2°08'25	minimum elong	-3713 Apr 04 j 16:59	14° \approx 14'15	2°11'31
max. Earth dist.	-3721 Mar 17 j 15:14	26° \approx 13'58	30.82067 AU	max. Earth dist.	-3713 Apr 05 j 03:24	14° \approx 15'13	30.83232 AU
retrograde	-3721 Jul 02 j 06:42	28° \approx 46'42		retrograde	-3713 Jul 20 j 12:55	16° \approx 47'54	
opposition	-3721 Sep 19 j 09:59	27° \approx 21'26	-2°-17'-50	opposition	-3713 Oct 07 j 01:36	15° \approx 22'58	-2°-20'-20
min. Earth dist.	-3721 Sep 18 j 18:09	27° \approx 22'34	28.82374 AU	min. Earth dist.	-3713 Oct 06 j 16:03	15° \approx 23'39	28.83425 AU
direct	-3721 Dec 05 j 19:00	25° \approx 57'25		direct	-3713 Dec 23 j 17:53	13° \approx 58'30	
conjunction	-3720 Mar 18 j 11:10	28° \approx 27'20	-2°-9'-24	conjunction	-3712 Apr 06 j 07:29	16° \approx 29'12	-2°-10'-57
minimum elong	-3720 Mar 18 j 11:10	28° \approx 27'20	2°09'31	minimum elong	-3712 Apr 06 j 07:30	16° \approx 29'12	2°11'01
max. Earth dist.	-3720 Mar 19 j 05:14	28° \approx 29'02	30.82365 AU	max. Earth dist.	-3712 Apr 06 j 17:15	16° \approx 30'07	30.83317 AU
	-3720 May 01 j 15:21	0° \approx		retrograde	-3712 Jul 22 j 01:32	19° \approx 02'43	
retrograde	-3720 Jul 03 j 21:16	1° \approx 01'44		opposition	-3712 Oct 08 j 12:23	17° \approx 37'50	-2°-19'-41
	-3720 Sep 06 j 22:17	30° \approx		min. Earth dist.	-3712 Oct 08 j 04:26	17° \approx 38'24	28.83564 AU
opposition	-3720 Sep 20 j 20:58	29° \approx 36'33	-2°-18'-54	direct	-3712 Dec 25 j 05:54	16° \approx 13'18	
min. Earth dist.	-3720 Sep 20 j 04:58	29° \approx 37'41	28.82683 AU				
direct	-3720 Dec 07 j 07:24	28° \approx 12'31		conjunction	-3711 Apr 08 j 22:02	18° \approx 44'06	-2°-10'-15
	-3719 Mar 01 j 20:52	0° \approx		minimum elong	-3711 Apr 08 j 22:02	18° \approx 44'06	2°10'17
conjunction	-3719 Mar 21 j 01:34	0° \approx 42'34	-2°-10'-18	max. Earth dist.	-3711 Apr 09 j 07:14	18° \approx 44'57	30.83521 AU
minimum elong	-3719 Mar 21 j 01:34	0° \approx 42'34	2°10'23	retrograde	-3711 Jul 24 j 15:16	21° \approx 17'28	
max. Earth dist.	-3719 Mar 21 j 18:03	0° \approx 44'06	30.82670 AU	opposition	-3711 Oct 10 j 22:54	19° \approx 52'38	-2°-18'-49
retrograde	-3719 Jul 06 j 09:10	3° \approx 16'54		min. Earth dist.	-3711 Oct 10 j 14:37	19° \approx 53'13	28.83825 AU
opposition	-3719 Sep 23 j 08:02	1° \approx 51'47	-2°-19'-44	direct	-3711 Dec 27 j 19:09	18° \approx 28'03	

Attention, astronomical year style is used: The year -3710 in astronomical counting style is the year 3711 BCE in historical counting style.

conjunction	-3710 Apr 11 j 12:28	20° ✕ 58'57	-2°-9'-21	direct	-3702 Jan 14 j 16:53	6° Υ 27'14	
minimum elong	-3710 Apr 11 j 12:28	20° ✕ 58'57	2°09'24				
max. Earth dist.	-3710 Apr 11 j 20:26	20° ✕ 59'41	30.83852 AU	conjunction	-3702 Apr 30 j 09:36	8° Υ 58'50	-1°-55'-9
retrograde	-3710 Jul 27 j 02:50	23° ✕ 32'12		minimum elong	-3702 Apr 30 j 09:36	8° Υ 58'50	1°55'10
opposition	-3710 Oct 13 j 09:37	22° ✕ 07'25	-2°-17'-45	max. Earth dist.	-3702 Apr 30 j 09:12	8° Υ 58'48	30.88102 AU
min. Earth dist.	-3710 Oct 13 j 02:45	22° ✕ 07'55	28.84234 AU	retrograde	-3702 Aug 14 j 03:43	11° Υ 30'57	
direct	-3710 Dec 30 j 05:40	20° ✕ 42'49		opposition	-3702 Oct 30 j 22:04	10° Υ 06'42	-2°-1'-46
				min. Earth dist.	-3702 Oct 30 j 22:11	10° Υ 06'41	28.88394 AU
conjunction	-3709 Apr 14 j 02:55	23° ✕ 13'48	-2°-8'-14	direct	-3701 Jan 17 j 07:05	8° Υ 41'45	
minimum elong	-3709 Apr 14 j 02:55	23° ✕ 13'48	2°08'16				
max. Earth dist.	-3709 Apr 14 j 11:05	23° ✕ 14'34	30.84336 AU	conjunction	-3701 May 02 j 23:59	11° Υ 13'23	-1°-52'-34
retrograde	-3709 Jul 29 j 15:20	25° ✕ 46'57		minimum elong	-3701 May 02 j 23:59	11° Υ 13'23	1°52'33
opposition	-3709 Oct 15 j 20:11	24° ✕ 22'16	-2°-16'-27	max. Earth dist.	-3701 May 02 j 22:10	11° Υ 13'13	30.88459 AU
min. Earth dist.	-3709 Oct 15 j 13:24	24° ✕ 22'45	28.84765 AU	retrograde	-3701 Aug 16 j 15:19	13° Υ 45'18	
direct	-3708 Jan 01 j 18:06	22° ✕ 57'39		opposition	-3701 Nov 02 j 08:32	12° Υ 21'05	-1°-58'-55
				min. Earth dist.	-3701 Nov 02 j 10:24	12° Υ 20'57	28.88767 AU
conjunction	-3708 Apr 15 j 17:28	25° ✕ 28'45	-2°-6'-56	direct	-3700 Jan 19 j 18:28	10° Υ 56'03	
minimum elong	-3708 Apr 15 j 17:28	25° ✕ 28'45	2°06'59				
max. Earth dist.	-3708 Apr 15 j 23:41	25° ✕ 29'19	30.84926 AU	conjunction	-3700 May 04 j 14:30	13° Υ 27'43	-1°-49'-49
retrograde	-3708 Jul 31 j 04:09	28° ✕ 01'46		minimum elong	-3700 May 04 j 14:31	13° Υ 27'43	1°49'49
opposition	-3708 Oct 17 j 06:43	26° ✕ 37'11	-2°-14'-57	max. Earth dist.	-3700 May 04 j 12:32	13° Υ 27'32	30.88865 AU
min. Earth dist.	-3708 Oct 17 j 01:03	26° ✕ 37'35	28.85396 AU	retrograde	-3700 Aug 18 j 03:31	15° Υ 59'25	
direct	-3707 Jan 03 j 03:43	25° ✕ 12'33		opposition	-3700 Nov 03 j 18:45	14° Υ 35'14	-1°-55'-53
				min. Earth dist.	-3700 Nov 03 j 20:51	14° Υ 35'05	28.89197 AU
conjunction	-3707 Apr 18 j 08:15	27° ✕ 43'46	-2°-5'-26	direct	-3699 Jan 21 j 08:05	13° Υ 10'09	
minimum elong	-3707 Apr 18 j 08:15	27° ✕ 43'46	2°05'28				
max. Earth dist.	-3707 Apr 18 j 14:34	27° ✕ 44'21	30.85579 AU	conjunction	-3699 May 07 j 04:48	15° Υ 41'51	-1°-46'-55
	-3707 Jul 01 j 23:48	0° Υ		minimum elong	-3699 May 07 j 04:48	15° Υ 41'51	1°46'53
retrograde	-3707 Aug 02 j 14:42	0° Υ 16'41		max. Earth dist.	-3699 May 07 j 01:01	15° Υ 41'30	30.89351 AU
	-3707 Sep 03 j 12:51	30° ℞		retrograde	-3699 Aug 20 j 15:21	18° Υ 13'22	
opposition	-3707 Oct 19 j 17:20	28° ✕ 52'12	-2°-13'-15	opposition	-3699 Nov 06 j 05:09	16° Υ 49'14	-1°-52'-41
min. Earth dist.	-3707 Oct 19 j 12:42	28° ✕ 52'32	28.86045 AU	min. Earth dist.	-3699 Nov 06 j 08:06	16° Υ 49'01	28.89749 AU
direct	-3706 Jan 05 j 15:39	27° ✕ 27'33		direct	-3698 Jan 23 j 18:50	15° Υ 24'05	
conjunction	-3706 Apr 20 j 22:45	29° ✕ 58'52	-2°-3'-45	conjunction	-3698 May 09 j 18:58	17° Υ 55'50	-1°-43'-50
minimum elong	-3706 Apr 20 j 22:45	29° ✕ 58'52	2°03'47	minimum elong	-3698 May 09 j 18:59	17° Υ 55'50	1°43'49
max. Earth dist.	-3706 Apr 21 j 02:51	29° ✕ 59'15	30.86227 AU	max. Earth dist.	-3698 May 09 j 15:36	17° Υ 55'31	30.89970 AU
	-3706 Apr 21 j 10:49	0° Υ		retrograde	-3698 Aug 23 j 01:09	20° Υ 27'11	
retrograde	-3706 Aug 05 j 03:12	2° Υ 31'41		opposition	-3698 Nov 08 j 15:30	19° Υ 03'06	-1°-49'-19
opposition	-3706 Oct 22 j 03:57	1° Υ 07'16	-2°-11'-20	min. Earth dist.	-3698 Nov 08 j 19:04	19° Υ 02'51	28.90429 AU
min. Earth dist.	-3706 Oct 21 j 23:59	1° Υ 07'33	28.86671 AU	direct	-3697 Jan 26 j 07:18	17° Υ 37'56	
	-3706 Dec 06 j 16:24	30° ℞					
direct	-3705 Jan 08 j 03:23	29° ✕ 42'35		conjunction	-3697 May 12 j 09:05	20° Υ 09'44	-1°-40'-37
	-3705 Feb 09 j 09:33	0° Υ		minimum elong	-3697 May 12 j 09:05	20° Υ 09'44	1°40'35
				max. Earth dist.	-3697 May 12 j 03:52	20° Υ 09'15	30.90738 AU
conjunction	-3705 Apr 23 j 13:33	2° Υ 14'01	-2°-1'-52	retrograde	-3697 Aug 25 j 12:55	22° Υ 40'55	
minimum elong	-3705 Apr 23 j 13:34	2° Υ 14'01	2°01'53	opposition	-3697 Nov 11 j 01:39	21° Υ 16'56	-1°-45'-47
max. Earth dist.	-3705 Apr 23 j 17:20	2° Υ 14'22	30.86813 AU	min. Earth dist.	-3697 Nov 11 j 05:27	21° Υ 16'40	28.91268 AU
retrograde	-3705 Aug 07 j 14:14	4° Υ 46'40		direct	-3696 Jan 28 j 18:13	19° Υ 51'45	
opposition	-3705 Oct 24 j 14:34	3° Υ 22'20	-2°-9'-14				
min. Earth dist.	-3705 Oct 24 j 12:28	3° Υ 22'29	28.87212 AU	conjunction	-3696 May 13 j 23:24	22° Υ 23'38	-1°-37'-14
direct	-3704 Jan 10 j 14:59	1° Υ 57'36		minimum elong	-3696 May 13 j 23:24	22° Υ 23'38	1°37'13
				max. Earth dist.	-3696 May 13 j 18:26	22° Υ 23'10	30.91644 AU
conjunction	-3704 Apr 25 j 04:18	4° Υ 29'06	-1°-59'-49	retrograde	-3696 Aug 26 j 23:17	24° Υ 54'41	
minimum elong	-3704 Apr 25 j 04:18	4° Υ 29'06	1°59'50	opposition	-3696 Nov 12 j 12:03	23° Υ 30'49	-1°-42'-5
max. Earth dist.	-3704 Apr 25 j 06:02	4° Υ 29'16	30.87321 AU	min. Earth dist.	-3696 Nov 12 j 17:18	23° Υ 30'26	28.92220 AU
retrograde	-3704 Aug 09 j 03:24	7° Υ 01'35		direct	-3695 Jan 30 j 05:02	22° Υ 05'38	
opposition	-3704 Oct 26 j 01:07	5° Υ 37'18	-2°-6'-56				
min. Earth dist.	-3704 Oct 25 j 23:15	5° Υ 37'26	28.87665 AU	conjunction	-3695 May 16 j 13:27	24° Υ 37'36	-1°-33'-42
direct	-3703 Jan 12 j 04:00	4° Υ 12'30		minimum elong	-3695 May 16 j 13:27	24° Υ 37'36	1°33'39
				max. Earth dist.	-3695 May 16 j 06:54	24° Υ 36'59	30.92651 AU
conjunction	-3703 Apr 27 j 19:00	6° Υ 44'04	-1°-57'-34	retrograde	-3695 Aug 29 j 11:33	27° Υ 08'32	
minimum elong	-3703 Apr 27 j 19:01	6° Υ 44'04	1°57'34	opposition	-3695 Nov 14 j 22:15	25° Υ 44'46	-1°-38'-14
max. Earth dist.	-3703 Apr 27 j 19:45	6° Υ 44'08	30.87730 AU	min. Earth dist.	-3695 Nov 15 j 03:24	25° Υ 44'24	28.93247 AU
retrograde	-3703 Aug 11 j 14:56	9° Υ 16'22		direct	-3694 Feb 01 j 17:20	24° Υ 19'36	
opposition	-3703 Oct 28 j 11:42	7° Υ 52'06	-2°-4'-26				
min. Earth dist.	-3703 Oct 28 j 11:49	7° Υ 52'05	28.88042 AU	conjunction	-3694 May 19 j 03:38	26° Υ 51'40	-1°-30'-1

Attention, astronomical year style is used: The year -3694 in astronomical counting style is the year 3695 BCE in historical counting style.

minimum elong	-3694 May 19 j 03:38	26° Υ 51'40	1°29'59	minimum elong	-3686 Jun 06 j 18:40	14° R 42'20	0°56'20
max. Earth dist.	-3694 May 18 j 20:34	26° Υ 51'01	30.93688 AU	max. Earth dist.	-3686 Jun 06 j 03:13	14° R 40'54	31.00165 AU
retrograde	-3694 Aug 31 j 22:39	29° Υ 22'28			-3686 Jun 14 j 17:07	15° R	
opposition	-3694 Nov 17 j 08:40	27° Υ 58'50	-1°-34'-14	retrograde	-3686 Sep 18 j 15:49	17° R 11'43	
min. Earth dist.	-3694 Nov 17 j 15:43	27° Υ 58'20	28.94280 AU	opposition	-3686 Dec 04 j 19:23	15° R 48'34	0°-57'-51
direct	-3693 Feb 04 j 05:30	26° Υ 33'41		min. Earth dist.	-3686 Dec 05 j 08:15	15° R 47'40	29.00651 AU
					-3685 Jan 04 j 07:40	15° R	
conjunction	-3693 May 21 j 17:45	29° Υ 05'49	-1°-26'-13	direct	-3685 Feb 22 j 09:03	14° R 23'08	
minimum elong	-3693 May 21 j 17:45	29° Υ 05'49	1°26'09		-3685 Apr 11 j 15:27	15° R	
max. Earth dist.	-3693 May 21 j 09:24	29° Υ 05'03	30.94709 AU				
	-3693 Jun 15 j 12:50	0° R		conjunction	-3685 Jun 09 j 08:05	16° R 55'25	0°-51'-46
retrograde	-3693 Sep 03 j 11:14	1° R 36'29		minimum elong	-3685 Jun 09 j 08:05	16° R 55'25	0°51'41
opposition	-3693 Nov 19 j 19:01	0° R 12'57	-1°-30'-6	max. Earth dist.	-3685 Jun 08 j 16:39	16° R 53'59	31.01087 AU
min. Earth dist.	-3693 Nov 20 j 02:10	0° R 12'26	28.95252 AU	retrograde	-3685 Sep 21 j 01:22	19° R 24'38	
	-3693 Nov 27 j 10:17	30° R		opposition	-3685 Dec 07 j 05:48	18° R 01'32	0°-52'-51
direct	-3692 Feb 06 j 19:26	28° Υ 47'47		min. Earth dist.	-3685 Dec 07 j 20:04	18° R 00'32	29.01635 AU
	-3692 Apr 15 j 14:18	0° R		direct	-3684 Feb 24 j 20:39	16° R 36'06	
conjunction	-3692 May 23 j 07:57	1° R 20'00	-1°-22'-17	conjunction	-3684 Jun 10 j 21:24	19° R 08'23	0°-47'-4
minimum elong	-3692 May 23 j 07:58	1° R 20'00	1°22'13	minimum elong	-3684 Jun 10 j 21:24	19° R 08'23	0°46'58
max. Earth dist.	-3692 May 22 j 22:03	1° R 19'05	30.95636 AU	max. Earth dist.	-3684 Jun 10 j 05:11	19° R 06'53	31.02141 AU
retrograde	-3692 Sep 04 j 22:59	3° R 50'31		retrograde	-3684 Sep 22 j 12:49	21° R 37'27	
opposition	-3692 Nov 21 j 05:27	2° R 27'03	-1°-25'-49	opposition	-3684 Dec 08 j 16:03	20° R 14'27	0°-47'-47
min. Earth dist.	-3692 Nov 21 j 14:31	2° R 26'25	28.96136 AU	min. Earth dist.	-3684 Dec 09 j 05:52	20° R 13'28	29.02732 AU
direct	-3691 Feb 08 j 06:49	1° R 01'53		direct	-3683 Feb 26 j 09:35	18° R 49'00	
conjunction	-3691 May 25 j 22:09	3° R 34'09	-1°-18'-13	conjunction	-3683 Jun 13 j 10:41	21° R 21'20	0°-42'-17
minimum elong	-3691 May 25 j 22:09	3° R 34'09	1°18'09	minimum elong	-3683 Jun 13 j 10:41	21° R 21'20	0°42'11
max. Earth dist.	-3691 May 25 j 11:42	3° R 33'10	30.96480 AU	max. Earth dist.	-3683 Jun 12 j 17:43	21° R 19'46	31.03289 AU
retrograde	-3691 Sep 07 j 11:37	6° R 04'28		retrograde	-3683 Sep 25 j 00:04	23° R 50'16	
opposition	-3691 Nov 23 j 15:54	4° R 41'05	-1°-21'-25	opposition	-3683 Dec 11 j 02:32	22° R 27'22	0°-42'-38
min. Earth dist.	-3691 Nov 24 j 01:25	4° R 40'25	28.96921 AU	min. Earth dist.	-3683 Dec 11 j 17:41	22° R 26'18	29.03919 AU
direct	-3690 Feb 10 j 21:14	3° R 15'53		direct	-3682 Feb 28 j 20:51	21° R 01'57	
conjunction	-3690 May 28 j 11:56	5° R 48'10	-1°-14'-3	conjunction	-3682 Jun 15 j 23:47	23° R 34'18	0°-37'-26
minimum elong	-3690 May 28 j 11:57	5° R 48'10	1°14'00	minimum elong	-3682 Jun 15 j 23:47	23° R 34'18	0°37'20
max. Earth dist.	-3690 May 27 j 23:31	5° R 47'01	30.97234 AU	max. Earth dist.	-3682 Jun 15 j 06:48	23° R 32'44	31.04498 AU
retrograde	-3690 Sep 09 j 23:05	8° R 18'19		retrograde	-3682 Sep 27 j 11:56	26° R 03'06	
opposition	-3690 Nov 26 j 02:18	6° R 54'59	-1°-16'-55	opposition	-3682 Dec 13 j 12:56	24° R 40'18	0°-37'-26
min. Earth dist.	-3690 Nov 26 j 12:57	6° R 54'13	28.97648 AU	min. Earth dist.	-3682 Dec 14 j 04:22	24° R 39'13	29.05113 AU
direct	-3689 Feb 13 j 08:56	5° R 29'44		direct	-3681 Mar 03 j 11:11	23° R 14'56	
conjunction	-3689 May 31 j 01:56	8° R 02'01	-1°-9'-47	conjunction	-3681 Jun 18 j 12:57	25° R 47'19	0°-32'-32
minimum elong	-3689 May 31 j 01:56	8° R 02'01	1°09'43	minimum elong	-3681 Jun 18 j 12:57	25° R 47'19	0°32'26
max. Earth dist.	-3689 May 30 j 13:32	8° R 00'52	30.97940 AU	max. Earth dist.	-3681 Jun 17 j 18:18	25° R 45'35	31.05675 AU
retrograde	-3689 Sep 12 j 08:39	10° R 31'58		retrograde	-3681 Sep 29 j 23:32	28° R 16'00	
opposition	-3689 Nov 28 j 12:32	9° R 08'41	-1°-12'-18	opposition	-3681 Dec 15 j 23:20	26° R 53'17	0°-32'-10
min. Earth dist.	-3689 Nov 29 j 00:13	9° R 07'52	28.98329 AU	min. Earth dist.	-3681 Dec 16 j 15:45	26° R 52'08	29.06266 AU
direct	-3688 Feb 15 j 22:10	7° R 43'23		direct	-3680 Mar 04 j 22:54	25° R 27'55	
				max. Earth dist.	-3680 Jun 19 j 07:39	27° R 58'37	31.06777 AU
conjunction	-3688 Jun 01 j 15:40	10° R 15'41	-1°-5'-25	conjunction	-3680 Jun 20 j 02:14	28° R 00'20	0°-27'-36
minimum elong	-3688 Jun 01 j 15:40	10° R 15'41	1°05'21	minimum elong	-3680 Jun 20 j 02:14	28° R 00'20	0°27'30
max. Earth dist.	-3688 Jun 01 j 01:13	10° R 14'20	30.98632 AU		-3680 Aug 20 j 23:42	0° II	
retrograde	-3688 Sep 13 j 20:04	12° R 45'26		retrograde	-3680 Oct 01 j 09:42	0° II 28'53	
opposition	-3688 Nov 29 j 22:49	11° R 22'11	-1°-7'-34		-3680 Nov 12 j 15:42	30° R	
min. Earth dist.	-3688 Nov 30 j 10:47	11° R 21'20	28.99033 AU	opposition	-3680 Dec 17 j 09:59	29° R 06'16	0°-26'-52
direct	-3687 Feb 17 j 09:30	9° R 56'50		min. Earth dist.	-3680 Dec 18 j 03:26	29° R 05'02	29.07305 AU
				direct	-3679 Mar 07 j 12:14	27° R 40'55	
					-3679 Jun 16 j 15:41	0° II	
conjunction	-3687 Jun 04 j 05:17	12° R 29'07	-1°00'-57				
minimum elong	-3687 Jun 04 j 05:17	12° R 29'07	1°00'52	conjunction	-3679 Jun 22 j 15:07	0° II 13'20	0°-22'-37
max. Earth dist.	-3687 Jun 03 j 15:14	12° R 27'48	30.99354 AU	minimum elong	-3679 Jun 22 j 15:07	0° II 13'20	0°22'31
retrograde	-3687 Sep 16 j 05:22	14° R 58'40		max. Earth dist.	-3679 Jun 21 j 18:29	0° II 11'25	31.07759 AU
opposition	-3687 Dec 02 j 09:13	13° R 35'28	-1°-2'-45	retrograde	-3679 Oct 03 j 21:29	2° II 41'44	
min. Earth dist.	-3687 Dec 02 j 22:32	13° R 34'32	28.99786 AU	opposition	-3679 Dec 19 j 20:35	1° II 19'11	0°-21'-31
direct	-3686 Feb 19 j 20:31	12° R 10'04		min. Earth dist.	-3679 Dec 20 j 14:18	1° II 17'56	29.08232 AU
conjunction	-3686 Jun 06 j 18:40	14° R 42'20	0°-56'-24				

Attention, astronomical year style is used: The year -3678 in astronomical counting style is the year 3679 BCE in historical counting style.

	-3678 Feb 18 j 09:16	30° $\text{R}\text{8}$		behind sun end	-3672 Jul 08 j 10:48	15° $\text{II}40'39$	
direct	-3678 Mar 10 j 00:06	29° $\text{R}53'49$		retrograde	-3672 Oct 18 j 20:58	18° $\text{II}07'45$	
	-3678 Mar 29 j 10:46	0° II		opposition	-3671 Jan 03 j 22:45	16° $\text{II}45'27$	0°16'07
max. Earth dist.	-3678 Jun 24 j 07:43	2° $\text{II}24'21$	31.08620 AU	min. Earth dist.	-3671 Jan 04 j 19:49	16° $\text{II}43'59$	29.13461 AU
				direct	-3671 Mar 25 j 13:47	15° $\text{II}19'59$	
conjunction	-3678 Jun 25 j 04:10	2° $\text{II}26'14$	0°-17'-37				
minimum elong	-3678 Jun 25 j 04:10	2° $\text{II}26'14$	0°17'31	conjunction	-3671 Jul 10 j 18:44	17° $\text{II}52'12$	0°17'39
retrograde	-3678 Oct 06 j 06:41	4° $\text{II}54'30$		minimum elong	-3671 Jul 10 j 18:44	17° $\text{II}52'12$	0°17'47
opposition	-3678 Dec 22 j 07:10	3° $\text{II}32'00$	0°-16'-9	max. Earth dist.	-3671 Jul 09 j 19:47	17° $\text{II}50'05$	31.13923 AU
min. Earth dist.	-3678 Dec 23 j 02:32	3° $\text{II}30'38$	29.09035 AU	retrograde	-3671 Oct 21 j 07:00	20° $\text{II}19'34$	
direct	-3677 Mar 12 j 11:42	2° $\text{II}06'37$		opposition	-3670 Jan 06 j 09:30	18° $\text{II}57'22$	0°21'27
				min. Earth dist.	-3670 Jan 07 j 06:57	18° $\text{II}55'52$	29.14460 AU
conjunction	-3677 Jun 27 j 16:56	4° $\text{II}39'01$	0°-12'-35	direct	-3670 Mar 28 j 03:04	17° $\text{II}31'56$	
minimum elong	-3677 Jun 27 j 16:56	4° $\text{II}39'01$	0°12'29	max. Earth dist.	-3670 Jul 12 j 06:20	20° $\text{II}01'54$	31.14959 AU
behind sun begin	-3677 Jun 27 j 12:45	4° $\text{II}38'38$					
behind sun end	-3677 Jun 27 j 21:08	4° $\text{II}39'23$		conjunction	-3670 Jul 13 j 06:35	20° $\text{II}04'09$	0°22'37
max. Earth dist.	-3677 Jun 26 j 18:50	4° $\text{II}36'57$	31.09380 AU	minimum elong	-3670 Jul 13 j 06:35	20° $\text{II}04'09$	0°22'46
retrograde	-3677 Oct 08 j 16:58	7° $\text{II}07'07$		retrograde	-3670 Oct 23 j 19:09	22° $\text{II}31'26$	
opposition	-3677 Dec 24 j 17:41	5° $\text{II}44'40$	0°-10'-46	opposition	-3669 Jan 08 j 20:02	21° $\text{II}09'18$	0°26'45
min. Earth dist.	-3677 Dec 25 j 12:48	5° $\text{II}43'19$	29.09745 AU	min. Earth dist.	-3669 Jan 09 j 17:15	21° $\text{II}07'50$	29.15519 AU
direct	-3676 Mar 14 j 00:25	4° $\text{II}19'15$		direct	-3669 Mar 30 j 15:16	19° $\text{II}43'55$	
max. Earth dist.	-3676 Jun 28 j 07:32	6° $\text{II}49'34$	31.10050 AU				
				conjunction	-3669 Jul 15 j 18:36	22° $\text{II}16'09$	0°27'34
conjunction	-3676 Jun 29 j 05:43	6° $\text{II}51'37$	0°-7'-34	minimum elong	-3669 Jul 15 j 18:36	22° $\text{II}16'09$	0°27'42
minimum elong	-3676 Jun 29 j 05:42	6° $\text{II}51'37$	0°07'27	max. Earth dist.	-3669 Jul 14 j 19:04	22° $\text{II}13'58$	31.16007 AU
behind sun begin	-3676 Jun 28 j 23:44	6° $\text{II}51'05$		retrograde	-3669 Oct 26 j 04:23	24° $\text{II}43'21$	
behind sun end	-3676 Jun 29 j 11:40	6° $\text{II}52'09$		opposition	-3668 Jan 11 j 06:58	23° $\text{II}21'18$	0°32'00
retrograde	-3676 Oct 10 j 01:55	9° $\text{II}19'34$		min. Earth dist.	-3668 Jan 12 j 05:28	23° $\text{II}19'44$	29.16550 AU
opposition	-3676 Dec 26 j 04:21	7° $\text{II}57'09$	0°-5'-23	direct	-3668 Apr 01 j 03:24	21° $\text{II}55'58$	
min. Earth dist.	-3676 Dec 27 j 01:00	7° $\text{II}55'42$	29.10399 AU	max. Earth dist.	-3668 Jul 16 j 05:36	24° $\text{II}25'52$	31.17007 AU
direct	-3675 Mar 16 j 11:43	6° $\text{II}31'42$					
				conjunction	-3668 Jul 17 j 06:20	24° $\text{II}28'10$	0°32'28
conjunction	-3675 Jul 01 j 18:11	9° $\text{II}04'02$	0°-2'-32	minimum elong	-3668 Jul 17 j 06:20	24° $\text{II}28'10$	0°32'37
minimum elong	-3675 Jul 01 j 18:11	9° $\text{II}04'02$	0°02'25	retrograde	-3668 Oct 27 j 14:27	26° $\text{II}55'18$	
behind sun begin	-3675 Jul 01 j 11:38	9° $\text{II}03'27$		opposition	-3667 Jan 12 j 17:50	25° $\text{II}33'19$	0°37'13
behind sun end	-3675 Jul 02 j 00:44	9° $\text{II}04'37$		min. Earth dist.	-3667 Jan 13 j 15:46	25° $\text{II}31'48$	29.17509 AU
max. Earth dist.	-3675 Jun 30 j 19:18	9° $\text{II}01'54$	31.10702 AU	direct	-3667 Apr 03 j 15:39	24° $\text{II}08'00$	
retrograde	-3675 Oct 12 j 12:31	11° $\text{II}31'51$					
opposition	-3675 Dec 28 j 14:54	10° $\text{II}09'26$	0°00'00	conjunction	-3667 Jul 19 j 18:11	26° $\text{II}40'11$	0°37'19
asc. node	-3675 Dec 28 j 20:47	10° $\text{II}09'02$		minimum elong	-3667 Jul 19 j 18:11	26° $\text{II}40'11$	0°37'27
min. Earth dist.	-3675 Dec 29 j 11:00	10° $\text{II}08'02$	29.11051 AU	max. Earth dist.	-3667 Jul 18 j 17:37	26° $\text{II}37'54$	31.17903 AU
direct	-3674 Mar 19 j 00:14	8° $\text{II}43'58$		retrograde	-3667 Oct 29 j 23:37	29° $\text{II}07'14$	
max. Earth dist.	-3674 Jul 03 j 07:05	11° $\text{II}14'05$	31.11368 AU	opposition	-3666 Jan 15 j 04:55	27° $\text{II}45'17$	0°42'22
				min. Earth dist.	-3666 Jan 16 j 04:15	27° $\text{II}43'40$	29.18362 AU
conjunction	-3674 Jul 04 j 06:25	11° $\text{II}16'15$	0°02'38	direct	-3666 Apr 06 j 02:18	26° $\text{II}20'00$	
minimum elong	-3674 Jul 04 j 06:25	11° $\text{II}16'15$	0°02'46	max. Earth dist.	-3666 Jul 21 j 04:29	28° $\text{II}49'46$	31.18693 AU
behind sun begin	-3674 Jul 03 j 23:53	11° $\text{II}15'40$					
behind sun end	-3674 Jul 04 j 12:57	11° $\text{II}16'50$		conjunction	-3666 Jul 22 j 05:45	28° $\text{II}52'07$	0°42'06
retrograde	-3674 Oct 14 j 22:54	13° $\text{II}43'57$		minimum elong	-3666 Jul 22 j 05:45	28° $\text{II}52'07$	0°42'15
opposition	-3674 Dec 31 j 01:33	12° $\text{II}21'34$	0°05'23		-3666 Aug 22 j 16:03	0° III	
min. Earth dist.	-3674 Dec 31 j 22:41	12° $\text{II}20'05$	29.11759 AU	retrograde	-3666 Nov 01 j 09:50	1° $\text{III}19'04$	
direct	-3673 Mar 21 j 11:55	10° $\text{II}56'04$			-3665 Jan 15 j 22:48	30° RII	
				opposition	-3665 Jan 17 j 15:52	29° $\text{II}57'10$	0°47'28
conjunction	-3673 Jul 06 j 18:40	13° $\text{II}28'19$	0°07'39	min. Earth dist.	-3665 Jan 18 j 14:44	29° $\text{II}55'35$	29.19081 AU
minimum elong	-3673 Jul 06 j 18:40	13° $\text{II}28'19$	0°07'47	direct	-3665 Apr 08 j 14:33	28° $\text{II}31'52$	
behind sun begin	-3673 Jul 06 j 12:47	13° $\text{II}27'48$			-3665 Jun 25 j 05:48	0° III	
behind sun end	-3673 Jul 07 j 00:33	13° $\text{II}28'51$					
max. Earth dist.	-3673 Jul 05 j 19:41	13° $\text{II}26'11$	31.12116 AU	conjunction	-3665 Jul 24 j 17:22	1° $\text{III}03'55$	0°46'50
retrograde	-3673 Oct 17 j 09:55	15° $\text{II}55'53$		minimum elong	-3665 Jul 24 j 17:22	1° $\text{III}03'55$	0°46'58
opposition	-3672 Jan 02 j 12:03	14° $\text{II}33'32$	0°10'45	max. Earth dist.	-3665 Jul 23 j 15:28	1° $\text{III}01'31$	31.19342 AU
min. Earth dist.	-3672 Jan 03 j 08:58	14° $\text{II}32'05$	29.12548 AU	retrograde	-3665 Nov 03 j 19:37	3° $\text{III}30'47$	
direct	-3672 Mar 23 j 02:18	13° $\text{II}08'03$		opposition	-3664 Jan 20 j 02:53	2° $\text{III}08'53$	0°52'29
max. Earth dist.	-3672 Jul 07 j 06:52	15° $\text{II}38'04$	31.12961 AU	min. Earth dist.	-3664 Jan 21 j 02:53	2° $\text{III}07'14$	29.19686 AU
				direct	-3664 Apr 10 j 02:11	0° $\text{III}43'34$	
conjunction	-3672 Jul 08 j 06:47	15° $\text{II}40'17$	0°12'39	max. Earth dist.	-3664 Jul 25 j 03:16	3° $\text{III}13'10$	31.19896 AU
minimum elong	-3672 Jul 08 j 06:47	15° $\text{II}40'17$	0°12'47				
behind sun begin	-3672 Jul 08 j 02:45	15° $\text{II}39'56$		conjunction	-3664 Jul 26 j 04:52	3° $\text{III}15'33$	0°51'29

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Attention, astronomical year style is used: The year -3664 in astronomical counting style is the year 3665 BCE in historical counting style.

minimum elong	-3664 Jul 26 j 04:51	3° $\overline{5}$ 15'33	0°51'38	min. Earth dist.	-3655 Feb 09 j 06:44	21° $\overline{5}$ 46'57	29.25573 AU
retrograde	-3664 Nov 05 j 05:43	5° $\overline{5}$ 42'19		direct	-3655 Apr 30 j 14:46	20° $\overline{5}$ 23'29	
opposition	-3663 Jan 21 j 14:00	4° $\overline{5}$ 20'24	0°57'25	max. Earth dist.	-3655 Aug 14 j 06:07	22° $\overline{5}$ 52'45	31.25845 AU
min. Earth dist.	-3663 Jan 22 j 13:51	4° $\overline{5}$ 18'46	29.20193 AU				
direct	-3663 Apr 12 j 15:49	2° $\overline{5}$ 55'05		conjunction	-3655 Aug 15 j 05:48	22° $\overline{5}$ 54'58	1°29'09
				minimum elong	-3655 Aug 15 j 05:47	22° $\overline{5}$ 54'58	1°29'16
conjunction	-3663 Jul 28 j 15:56	5° $\overline{5}$ 26'58	0°56'04	retrograde	-3655 Nov 25 j 00:58	25° $\overline{5}$ 21'27	
minimum elong	-3663 Jul 28 j 15:56	5° $\overline{5}$ 26'58	0°56'12	opposition	-3654 Feb 10 j 19:19	23° $\overline{5}$ 59'47	1°37'09
max. Earth dist.	-3663 Jul 27 j 13:29	5° $\overline{5}$ 24'30	31.20371 AU	min. Earth dist.	-3654 Feb 11 j 17:59	23° $\overline{5}$ 58'14	29.26284 AU
retrograde	-3663 Nov 07 j 16:33	7° $\overline{5}$ 53'39		direct	-3654 May 03 j 03:03	22° $\overline{5}$ 34'48	
opposition	-3662 Jan 24 j 01:03	6° $\overline{5}$ 31'43	1°02'15				
min. Earth dist.	-3662 Jan 25 j 01:01	6° $\overline{5}$ 30'04	29.20666 AU	conjunction	-3654 Aug 17 j 16:16	25° $\overline{5}$ 06'13	1°32'46
direct	-3662 Apr 15 j 03:05	5° $\overline{5}$ 06'22		minimum elong	-3654 Aug 17 j 16:16	25° $\overline{5}$ 06'13	1°32'53
max. Earth dist.	-3662 Jul 30 j 01:43	7° $\overline{5}$ 35'48	31.20833 AU	max. Earth dist.	-3654 Aug 16 j 15:45	25° $\overline{5}$ 03'56	31.26491 AU
				retrograde	-3654 Nov 27 j 12:20	27° $\overline{5}$ 32'43	
conjunction	-3662 Jul 31 j 03:05	7° $\overline{5}$ 38'10	1°00'33	opposition	-3653 Feb 13 j 06:48	26° $\overline{5}$ 11'04	1°40'56
minimum elong	-3662 Jul 31 j 03:05	7° $\overline{5}$ 38'10	1°00'42	min. Earth dist.	-3653 Feb 14 j 05:32	26° $\overline{5}$ 09'31	29.26881 AU
retrograde	-3662 Nov 10 j 02:08	10° $\overline{5}$ 04'45		direct	-3653 May 05 j 13:16	24° $\overline{5}$ 46'08	
opposition	-3661 Jan 26 j 12:03	8° $\overline{5}$ 42'49	1°07'00	max. Earth dist.	-3653 Aug 19 j 03:20	27° $\overline{5}$ 15'18	31.27007 AU
min. Earth dist.	-3661 Jan 27 j 12:18	8° $\overline{5}$ 41'09	29.21138 AU				
direct	-3661 Apr 17 j 16:54	7° $\overline{5}$ 17'27		conjunction	-3653 Aug 20 j 02:51	27° $\overline{5}$ 17'30	1°36'14
max. Earth dist.	-3661 Aug 01 j 11:41	9° $\overline{5}$ 46'44	31.21330 AU	minimum elong	-3653 Aug 20 j 02:51	27° $\overline{5}$ 17'30	1°36'22
				retrograde	-3653 Nov 29 j 22:40	29° $\overline{5}$ 44'00	
conjunction	-3661 Aug 02 j 13:59	9° $\overline{5}$ 49'11	1°04'57	opposition	-3652 Feb 15 j 18:36	28° $\overline{5}$ 22'21	1°44'35
minimum elong	-3661 Aug 02 j 13:58	9° $\overline{5}$ 49'11	1°05'05	min. Earth dist.	-3652 Feb 16 j 17:39	28° $\overline{5}$ 20'46	29.27326 AU
retrograde	-3661 Nov 12 j 13:53	12° $\overline{5}$ 15'41		direct	-3652 May 07 j 03:10	26° $\overline{5}$ 57'27	
opposition	-3660 Jan 28 j 23:08	10° $\overline{5}$ 53'45	1°11'39				
min. Earth dist.	-3660 Jan 29 j 22:32	10° $\overline{5}$ 52'08	29.21684 AU	conjunction	-3652 Aug 21 j 13:04	29° $\overline{5}$ 28'44	1°39'35
direct	-3660 Apr 19 j 05:35	9° $\overline{5}$ 28'22		minimum elong	-3652 Aug 21 j 13:03	29° $\overline{5}$ 28'44	1°39'43
max. Earth dist.	-3660 Aug 02 j 23:55	11° $\overline{5}$ 57'43	31.21911 AU	max. Earth dist.	-3652 Aug 20 j 12:33	29° $\overline{5}$ 26'26	31.27386 AU
					-3652 Sep 04 j 12:54	0° $\overline{5}$	
conjunction	-3660 Aug 04 j 00:50	12° $\overline{5}$ 00'03	1°09'15	retrograde	-3652 Dec 01 j 11:07	1° $\overline{5}$ 55'13	
minimum elong	-3660 Aug 04 j 00:49	12° $\overline{5}$ 00'03	1°09'24	opposition	-3651 Feb 17 j 06:20	0° $\overline{5}$ 33'32	1°48'04
retrograde	-3660 Nov 13 j 22:46	14° $\overline{5}$ 26'31		min. Earth dist.	-3651 Feb 18 j 04:37	0° $\overline{5}$ 32'01	29.27651 AU
opposition	-3659 Jan 30 j 10:26	13° $\overline{5}$ 04'35	1°16'12		-3651 Mar 10 j 07:57	30° $\overline{5}$ 19'39	
min. Earth dist.	-3659 Jan 31 j 10:23	13° $\overline{5}$ 02'56	29.22325 AU	direct	-3651 May 09 j 16:05	29° $\overline{5}$ 08'39	
direct	-3659 Apr 21 j 18:02	11° $\overline{5}$ 39'15			-3651 Jul 06 j 10:09	0° $\overline{5}$	
max. Earth dist.	-3659 Aug 05 j 10:11	14° $\overline{5}$ 08'30	31.22614 AU				
				conjunction	-3651 Aug 23 j 23:24	1° $\overline{5}$ 39'51	1°42'47
conjunction	-3659 Aug 06 j 11:30	14° $\overline{5}$ 10'52	1°13'27	minimum elong	-3651 Aug 23 j 23:24	1° $\overline{5}$ 39'51	1°42'54
minimum elong	-3659 Aug 06 j 11:30	14° $\overline{5}$ 10'52	1°13'35	max. Earth dist.	-3651 Aug 23 j 00:04	1° $\overline{5}$ 37'39	31.27647 AU
retrograde	-3659 Nov 16 j 08:54	16° $\overline{5}$ 37'18		retrograde	-3651 Dec 03 j 20:14	4° $\overline{5}$ 06'19	
opposition	-3658 Feb 01 j 21:32	15° $\overline{5}$ 15'25	1°20'38	opposition	-3650 Feb 19 j 18:06	2° $\overline{5}$ 44'36	1°51'25
min. Earth dist.	-3658 Feb 02 j 20:09	15° $\overline{5}$ 13'52	29.23084 AU	min. Earth dist.	-3650 Feb 20 j 17:10	2° $\overline{5}$ 43'02	29.27875 AU
direct	-3658 Apr 24 j 06:01	13° $\overline{5}$ 50'08		direct	-3650 May 12 j 04:34	1° $\overline{5}$ 19'43	
				max. Earth dist.	-3650 Aug 25 j 09:41	3° $\overline{5}$ 48'34	31.27842 AU
conjunction	-3658 Aug 08 j 22:10	16° $\overline{5}$ 21'44	1°17'33				
minimum elong	-3658 Aug 08 j 22:10	16° $\overline{5}$ 21'44	1°17'42	conjunction	-3650 Aug 26 j 09:24	3° $\overline{5}$ 50'48	1°45'49
max. Earth dist.	-3658 Aug 07 j 21:46	16° $\overline{5}$ 19'27	31.23407 AU	minimum elong	-3650 Aug 26 j 09:23	3° $\overline{5}$ 50'48	1°45'57
retrograde	-3658 Nov 18 j 18:14	18° $\overline{5}$ 48'09		retrograde	-3650 Dec 06 j 06:27	6° $\overline{5}$ 17'14	
opposition	-3657 Feb 04 j 08:52	17° $\overline{5}$ 26'20	1°24'57	opposition	-3649 Feb 22 j 05:47	4° $\overline{5}$ 55'30	1°54'35
min. Earth dist.	-3657 Feb 05 j 08:15	17° $\overline{5}$ 24'44	29.23916 AU	min. Earth dist.	-3649 Feb 23 j 03:30	4° $\overline{5}$ 54'01	29.28050 AU
direct	-3657 Apr 26 j 16:27	16° $\overline{5}$ 01'08		direct	-3649 May 14 j 17:47	3° $\overline{5}$ 30'36	
max. Earth dist.	-3657 Aug 10 j 08:24	18° $\overline{5}$ 30'24	31.24255 AU				
				conjunction	-3649 Aug 28 j 19:23	6° $\overline{5}$ 01'34	1°48'43
conjunction	-3657 Aug 11 j 08:45	18° $\overline{5}$ 32'41	1°21'32	minimum elong	-3649 Aug 28 j 19:22	6° $\overline{5}$ 01'34	1°48'50
minimum elong	-3657 Aug 11 j 08:45	18° $\overline{5}$ 32'41	1°21'40	max. Earth dist.	-3649 Aug 27 j 20:39	5° $\overline{5}$ 59'26	31.27999 AU
retrograde	-3657 Nov 21 j 04:22	20° $\overline{5}$ 59'07		retrograde	-3649 Dec 08 j 15:58	8° $\overline{5}$ 28'00	
opposition	-3656 Feb 06 j 20:08	19° $\overline{5}$ 37'22	1°29'09	opposition	-3648 Feb 24 j 17:41	7° $\overline{5}$ 06'13	1°57'36
min. Earth dist.	-3656 Feb 07 j 18:30	19° $\overline{5}$ 35'50	29.24759 AU	min. Earth dist.	-3648 Feb 25 j 15:51	7° $\overline{5}$ 04'42	29.28232 AU
direct	-3656 Apr 28 j 04:08	18° $\overline{5}$ 12'15		direct	-3648 May 16 j 05:40	5° $\overline{5}$ 41'20	
				max. Earth dist.	-3648 Aug 29 j 07:03	8° $\overline{5}$ 10'06	31.28208 AU
conjunction	-3656 Aug 12 j 19:21	20° $\overline{5}$ 43'46	1°25'24				
minimum elong	-3656 Aug 12 j 19:20	20° $\overline{5}$ 43'46	1°25'33	conjunction	-3648 Aug 30 j 05:11	8° $\overline{5}$ 12'11	1°51'27
max. Earth dist.	-3656 Aug 11 j 18:55	20° $\overline{5}$ 41'29	31.25078 AU	minimum elong	-3648 Aug 30 j 05:10	8° $\overline{5}$ 12'11	1°51'35
retrograde	-3656 Nov 22 j 14:41	23° $\overline{5}$ 10'14		retrograde	-3648 Dec 10 j 01:24	10° $\overline{5}$ 38'37	
opposition	-3655 Feb 08 j 07:44	21° $\overline{5}$ 48'32	1°33'13	opposition	-3647 Feb 26 j 05:32	9° $\overline{5}$ 16'48	2°00'26

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Attention, astronomical year style is used: The year -3647 in astronomical counting style is the year 3648 BCE in historical counting style.

min. Earth dist.	-3647 Feb 27 j 02:03	9° Ω 15'24	29.28476 AU	min. Earth dist.	-3639 Mar 17 j 00:33	26° Ω 41'30	29.30627 AU
direct	-3647 May 18 j 18:18	7° Ω 51'57		direct	-3639 Jun 05 j 15:19	25° Ω 18'21	
conjunction	-3647 Sep 01 j 14:49	10° Ω 22'41	1°54'02	conjunction	-3639 Sep 18 j 19:41	27° Ω 48'27	2°08'29
minimum elong	-3647 Sep 01 j 14:49	10° Ω 22'41	1°54'08	minimum elong	-3639 Sep 18 j 19:41	27° Ω 48'27	2°08'34
max. Earth dist.	-3647 Aug 31 j 17:06	10° Ω 20'38	31.28489 AU	max. Earth dist.	-3639 Sep 18 j 02:34	27° Ω 46'51	31.30370 AU
retrograde	-3647 Dec 12 j 10:58	12° Ω 49'09			-3639 Nov 29 j 17:04	0° \mp	
opposition	-3646 Feb 28 j 17:30	11° Ω 27'19	2°03'06	retrograde	-3639 Dec 30 j 00:56	0° \mp 15'29	
min. Earth dist.	-3646 Mar 01 j 13:58	11° Ω 25'55	29.28815 AU		-3638 Jan 30 j 03:43	30° \mathbb{R} Ω	
direct	-3646 May 21 j 04:34	10° Ω 02'31		opposition	-3638 Mar 18 j 19:27	28° Ω 53'34	2°17'49
max. Earth dist.	-3646 Sep 03 j 04:15	12° Ω 31'15	31.28865 AU	min. Earth dist.	-3638 Mar 19 j 11:33	28° Ω 52'29	29.30406 AU
				direct	-3638 Jun 08 j 04:24	27° Ω 29'16	
conjunction	-3646 Sep 04 j 00:34	12° Ω 33'09	1°56'27	conjunction	-3638 Sep 21 j 05:05	29° Ω 59'15	2°09'30
minimum elong	-3646 Sep 04 j 00:34	12° Ω 33'09	1°56'33	minimum elong	-3638 Sep 21 j 05:05	29° Ω 59'15	2°09'34
retrograde	-3646 Dec 14 j 20:20	14° Ω 59'40		max. Earth dist.	-3638 Sep 20 j 12:00	29° Ω 57'39	31.30092 AU
opposition	-3645 Mar 03 j 05:18	13° Ω 37'50	2°05'36		-3638 Sep 21 j 13:01	0° \mp	
min. Earth dist.	-3645 Mar 04 j 00:52	13° Ω 36'30	29.29214 AU	retrograde	-3637 Jan 01 j 10:38	2° \mp 26'21	
direct	-3645 May 23 j 16:09	12° Ω 13'06		opposition	-3637 Mar 21 j 07:50	1° \mp 04'22	2°18'47
conjunction	-3645 Sep 06 j 10:11	14° Ω 43'40	1°58'41	min. Earth dist.	-3637 Mar 22 j 00:04	1° \mp 03'16	29.30095 AU
minimum elong	-3645 Sep 06 j 10:11	14° Ω 43'40	1°58'47		-3637 May 05 j 09:45	30° \mathbb{R} Ω	
max. Earth dist.	-3645 Sep 05 j 13:41	14° Ω 41'45	31.29289 AU	direct	-3637 Jun 10 j 15:04	29° Ω 40'04	
	-3645 Sep 13 j 16:11	15° Ω			-3637 Jul 15 j 19:36	0° \mp	
retrograde	-3645 Dec 17 j 08:04	17° Ω 10'15					
opposition	-3644 Mar 04 j 17:23	15° Ω 48'26	2°07'54	conjunction	-3637 Sep 23 j 14:26	2° \mp 09'56	2°10'19
min. Earth dist.	-3644 Mar 05 j 12:18	15° Ω 47'09	29.29658 AU	minimum elong	-3637 Sep 23 j 14:26	2° \mp 09'56	2°10'22
	-3644 Apr 05 j 08:37	15° \mathbb{R} Ω		max. Earth dist.	-3637 Sep 22 j 22:56	2° \mp 08'29	31.29756 AU
direct	-3644 May 25 j 01:58	14° Ω 23'46		retrograde	-3636 Jan 03 j 19:48	4° \mp 37'06	
	-3644 Jul 12 j 03:31	15° Ω		opposition	-3636 Mar 22 j 20:22	3° \mp 15'02	2°19'34
conjunction	-3644 Sep 07 j 19:48	16° Ω 54'17	2°00'46	min. Earth dist.	-3636 Mar 23 j 11:29	3° \mp 14'01	29.29743 AU
minimum elong	-3644 Sep 07 j 19:48	16° Ω 54'17	2°00'52	direct	-3636 Jun 12 j 02:58	1° \mp 50'46	
max. Earth dist.	-3644 Sep 07 j 01:00	16° Ω 52'31	31.29721 AU				
retrograde	-3644 Dec 18 j 18:26	19° Ω 20'56		conjunction	-3636 Sep 24 j 23:27	4° \mp 20'30	2°10'57
opposition	-3643 Mar 07 j 05:39	17° Ω 59'07	2°10'02	minimum elong	-3636 Sep 24 j 23:26	4° \mp 20'30	2°11'01
min. Earth dist.	-3643 Mar 08 j 00:25	17° Ω 57'51	29.30069 AU	max. Earth dist.	-3636 Sep 24 j 07:59	4° \mp 19'03	31.29415 AU
direct	-3643 May 27 j 14:46	16° Ω 34'33		retrograde	-3635 Jan 05 j 07:20	6° \mp 47'46	
max. Earth dist.	-3643 Sep 09 j 10:00	19° Ω 03'10	31.30102 AU	opposition	-3635 Mar 25 j 08:53	5° \mp 25'37	2°20'09
conjunction	-3643 Sep 10 j 05:22	19° Ω 04'59	2°02'40	min. Earth dist.	-3635 Mar 25 j 22:59	5° \mp 24'40	29.29436 AU
minimum elong	-3643 Sep 10 j 05:22	19° Ω 04'59	2°02'45	direct	-3635 Jun 14 j 13:01	4° \mp 01'22	
retrograde	-3643 Dec 21 j 07:12	21° Ω 31'44					
opposition	-3642 Mar 09 j 17:43	20° Ω 09'55	2°11'58	conjunction	-3635 Sep 27 j 08:41	6° \mp 30'59	2°11'23
min. Earth dist.	-3642 Mar 10 j 11:25	20° Ω 08'43	29.30416 AU	minimum elong	-3635 Sep 27 j 08:41	6° \mp 30'59	2°11'27
direct	-3642 May 30 j 02:11	18° Ω 45'25		max. Earth dist.	-3635 Sep 26 j 19:16	6° \mp 29'44	31.29135 AU
conjunction	-3642 Sep 12 j 15:05	21° Ω 15'48	2°04'23	retrograde	-3634 Jan 07 j 17:24	8° \mp 58'20	
minimum elong	-3642 Sep 12 j 15:05	21° Ω 15'48	2°04'30	opposition	-3634 Mar 27 j 21:18	7° \mp 36'08	2°20'31
max. Earth dist.	-3642 Sep 11 j 21:00	21° Ω 14'06	31.30381 AU	min. Earth dist.	-3634 Mar 28 j 10:45	7° \mp 35'14	29.29196 AU
retrograde	-3642 Dec 23 j 17:14	23° Ω 42'38		direct	-3634 Jun 17 j 01:13	6° \mp 11'56	
opposition	-3641 Mar 12 j 06:09	22° Ω 20'48	2°13'43				
min. Earth dist.	-3641 Mar 13 j 00:28	22° Ω 19'34	29.30633 AU	conjunction	-3634 Sep 29 j 17:43	8° \mp 41'28	2°11'39
direct	-3641 Jun 01 j 14:07	20° Ω 56'23		minimum elong	-3634 Sep 29 j 17:43	8° \mp 41'28	2°11'43
max. Earth dist.	-3641 Sep 14 j 06:17	23° Ω 24'57	31.30528 AU	max. Earth dist.	-3634 Sep 29 j 04:15	8° \mp 40'12	31.28947 AU
conjunction	-3641 Sep 15 j 00:37	23° Ω 26'41	2°05'56	retrograde	-3633 Jan 10 j 06:10	11° \mp 08'55	
minimum elong	-3641 Sep 15 j 00:37	23° Ω 26'41	2°06'01	opposition	-3633 Mar 30 j 09:45	9° \mp 46'40	2°20'42
retrograde	-3641 Dec 26 j 04:31	25° Ω 53'34		min. Earth dist.	-3633 Mar 30 j 21:27	9° \mp 45'53	29.29050 AU
opposition	-3640 Mar 13 j 18:30	24° Ω 31'44	2°15'16	direct	-3633 Jun 19 j 11:38	8° \mp 22'32	
min. Earth dist.	-3640 Mar 14 j 11:24	24° Ω 30'36	29.30704 AU				
direct	-3640 Jun 03 j 03:17	23° Ω 07'22		conjunction	-3633 Oct 02 j 02:46	10° \mp 52'00	2°11'43
conjunction	-3640 Sep 16 j 10:15	25° Ω 37'35	2°07'18	minimum elong	-3633 Oct 02 j 02:46	10° \mp 52'00	2°11'46
minimum elong	-3640 Sep 16 j 10:15	25° Ω 37'35	2°07'24	max. Earth dist.	-3633 Oct 01 j 15:11	10° \mp 50'54	31.28833 AU
max. Earth dist.	-3640 Sep 15 j 16:38	25° Ω 35'55	31.30516 AU	retrograde	-3632 Jan 12 j 16:25	13° \mp 19'34	
retrograde	-3640 Dec 27 j 15:10	28° Ω 04'33		opposition	-3632 Mar 31 j 22:28	11° \mp 57'18	2°20'40
opposition	-3639 Mar 16 j 07:04	26° Ω 42'41	2°16'38	min. Earth dist.	-3632 Apr 01 j 10:07	11° \mp 56'31	29.28962 AU
				direct	-3632 Jun 20 j 22:36	10° \mp 33'14	
				conjunction	-3632 Oct 03 j 11:48	13° \mp 02'37	2°11'36
				minimum elong	-3632 Oct 03 j 11:48	13° \mp 02'37	2°11'39
				max. Earth dist.	-3632 Oct 03 j 00:42	13° \mp 01'34	31.28776 AU

Attention, astronomical year style is used: The year -3631 in astronomical counting style is the year 3632 BCE in historical counting style.

retrograde	-3631 Jan	14 j 04:38	15° $\mathring{\text{N}}$ 30'19		retrograde	-3623 Jan	31 j 19:29	2° $\mathring{\text{S}}$ 58'04	
opposition	-3631 Apr	03 j 11:03	14° $\mathring{\text{N}}$ 08'02	2°20'26	opposition	-3623 Apr	21 j 18:08	1° $\mathring{\text{S}}$ 35'13	2°11'27
min. Earth dist.	-3631 Apr	03 j 20:46	14° $\mathring{\text{N}}$ 07'22	29.28908 AU	min. Earth dist.	-3623 Apr	21 j 22:41	1° $\mathring{\text{S}}$ 34'55	29.25381 AU
direct	-3631 Jun	23 j 11:35	12° $\mathring{\text{N}}$ 44'03		direct	-3623 Jul	11 j 07:28	0° $\mathring{\text{S}}$ 11'33	
conjunction	-3631 Oct	05 j 20:48	15° $\mathring{\text{N}}$ 13'22	2°11'17	conjunction	-3623 Oct	22 j 21:22	2° $\mathring{\text{S}}$ 40'00	2°02'08
minimum elong	-3631 Oct	05 j 20:49	15° $\mathring{\text{N}}$ 13'22	2°11'19	minimum elong	-3623 Oct	22 j 21:22	2° $\mathring{\text{S}}$ 40'00	2°02'07
max. Earth dist.	-3631 Oct	05 j 10:45	15° $\mathring{\text{N}}$ 12'25	31.28709 AU	max. Earth dist.	-3623 Oct	22 j 17:40	2° $\mathring{\text{S}}$ 39'39	31.24924 AU
retrograde	-3630 Jan	16 j 16:32	17° $\mathring{\text{N}}$ 41'12		retrograde	-3622 Feb	03 j 07:54	5° $\mathring{\text{S}}$ 08'46	
opposition	-3630 Apr	05 j 23:50	16° $\mathring{\text{N}}$ 18'52	2°20'00	opposition	-3622 Apr	24 j 06:56	3° $\mathring{\text{S}}$ 45'51	2°09'27
min. Earth dist.	-3630 Apr	06 j 09:48	16° $\mathring{\text{N}}$ 18'12	29.28825 AU	min. Earth dist.	-3622 Apr	24 j 09:15	3° $\mathring{\text{S}}$ 45'41	29.24755 AU
direct	-3630 Jun	25 j 23:19	14° $\mathring{\text{N}}$ 54'59		direct	-3622 Jul	13 j 19:59	2° $\mathring{\text{S}}$ 22'12	
conjunction	-3630 Oct	08 j 05:54	17° $\mathring{\text{N}}$ 24'13	2°10'47	conjunction	-3622 Oct	25 j 06:17	4° $\mathring{\text{S}}$ 50'34	2°00'11
minimum elong	-3630 Oct	08 j 05:54	17° $\mathring{\text{N}}$ 24'13	2°10'49	minimum elong	-3622 Oct	25 j 06:17	4° $\mathring{\text{S}}$ 50'34	2°00'10
max. Earth dist.	-3630 Oct	07 j 20:47	17° $\mathring{\text{N}}$ 23'21	31.28597 AU	max. Earth dist.	-3622 Oct	25 j 03:44	4° $\mathring{\text{S}}$ 50'20	31.24339 AU
retrograde	-3629 Jan	19 j 02:39	19° $\mathring{\text{N}}$ 52'10		retrograde	-3621 Feb	05 j 20:03	7° $\mathring{\text{S}}$ 19'29	
opposition	-3629 Apr	08 j 12:31	18° $\mathring{\text{N}}$ 29'49	2°19'22	opposition	-3621 Apr	26 j 19:53	5° $\mathring{\text{S}}$ 56'30	2°07'17
min. Earth dist.	-3629 Apr	08 j 20:52	18° $\mathring{\text{N}}$ 29'16	29.28659 AU	min. Earth dist.	-3621 Apr	26 j 21:59	5° $\mathring{\text{S}}$ 56'21	29.24224 AU
direct	-3629 Jun	28 j 12:06	17° $\mathring{\text{N}}$ 06'00		direct	-3621 Jul	16 j 07:11	4° $\mathring{\text{S}}$ 32'55	
conjunction	-3629 Oct	10 j 15:02	19° $\mathring{\text{N}}$ 35'08	2°10'05	conjunction	-3621 Oct	27 j 15:16	7° $\mathring{\text{S}}$ 01'13	1°58'03
minimum elong	-3629 Oct	10 j 15:02	19° $\mathring{\text{N}}$ 35'08	2°10'07	minimum elong	-3621 Oct	27 j 15:16	7° $\mathring{\text{S}}$ 01'13	1°58'02
max. Earth dist.	-3629 Oct	10 j 05:59	19° $\mathring{\text{N}}$ 34'17	31.28381 AU	max. Earth dist.	-3621 Oct	27 j 14:16	7° $\mathring{\text{S}}$ 01'07	31.23870 AU
retrograde	-3628 Jan	21 j 13:17	22° $\mathring{\text{N}}$ 03'14		retrograde	-3620 Feb	08 j 06:47	9° $\mathring{\text{S}}$ 30'17	
opposition	-3628 Apr	10 j 01:31	20° $\mathring{\text{N}}$ 40'50	2°18'32	opposition	-3620 Apr	28 j 08:48	8° $\mathring{\text{S}}$ 07'15	2°04'55
min. Earth dist.	-3628 Apr	10 j 09:51	20° $\mathring{\text{N}}$ 40'17	29.28392 AU	min. Earth dist.	-3620 Apr	28 j 08:43	8° $\mathring{\text{S}}$ 07'16	29.23787 AU
direct	-3628 Jun	29 j 22:59	19° $\mathring{\text{N}}$ 17'04		direct	-3620 Jul	17 j 19:33	6° $\mathring{\text{S}}$ 43'46	
conjunction	-3628 Oct	12 j 00:11	21° $\mathring{\text{N}}$ 46'07	2°09'13	conjunction	-3620 Oct	29 j 00:06	9° $\mathring{\text{S}}$ 12'00	1°55'46
minimum elong	-3628 Oct	12 j 00:11	21° $\mathring{\text{N}}$ 46'07	2°09'14	minimum elong	-3620 Oct	29 j 00:07	9° $\mathring{\text{S}}$ 12'00	1°55'45
max. Earth dist.	-3628 Oct	11 j 16:41	21° $\mathring{\text{N}}$ 45'24	31.28050 AU	max. Earth dist.	-3620 Oct	28 j 23:33	9° $\mathring{\text{S}}$ 11'56	31.23477 AU
retrograde	-3627 Jan	22 j 22:55	24° $\mathring{\text{N}}$ 14'20		retrograde	-3619 Feb	09 j 18:17	11° $\mathring{\text{S}}$ 41'15	
opposition	-3627 Apr	12 j 14:29	22° $\mathring{\text{N}}$ 51'52	2°17'30	opposition	-3619 Apr	30 j 21:52	10° $\mathring{\text{S}}$ 18'11	2°02'23
min. Earth dist.	-3627 Apr	12 j 21:51	22° $\mathring{\text{N}}$ 51'22	29.27981 AU	min. Earth dist.	-3619 Apr	30 j 21:22	10° $\mathring{\text{S}}$ 18'13	29.23423 AU
direct	-3627 Jul	02 j 11:37	21° $\mathring{\text{N}}$ 28'08		direct	-3619 Jul	20 j 06:14	8° $\mathring{\text{S}}$ 54'47	
conjunction	-3627 Oct	14 j 09:19	23° $\mathring{\text{N}}$ 57'04	2°08'09	conjunction	-3619 Oct	31 j 09:15	11° $\mathring{\text{S}}$ 22'58	1°53'18
minimum elong	-3627 Oct	14 j 09:20	23° $\mathring{\text{N}}$ 57'04	2°08'10	minimum elong	-3619 Oct	31 j 09:16	11° $\mathring{\text{S}}$ 22'58	1°53'16
max. Earth dist.	-3627 Oct	14 j 01:27	23° $\mathring{\text{N}}$ 56'20	31.27576 AU	max. Earth dist.	-3619 Oct	31 j 10:40	11° $\mathring{\text{S}}$ 23'06	31.23131 AU
retrograde	-3626 Jan	25 j 10:51	26° $\mathring{\text{N}}$ 25'24		retrograde	-3618 Feb	12 j 04:34	13° $\mathring{\text{S}}$ 52'24	
opposition	-3626 Apr	15 j 03:16	25° $\mathring{\text{N}}$ 02'52	2°16'16	opposition	-3618 May	03 j 10:42	12° $\mathring{\text{S}}$ 29'20	1°59'39
min. Earth dist.	-3626 Apr	15 j 09:59	25° $\mathring{\text{N}}$ 02'25	29.27444 AU	min. Earth dist.	-3618 May	03 j 08:59	12° $\mathring{\text{S}}$ 29'26	29.23066 AU
direct	-3626 Jul	04 j 21:57	23° $\mathring{\text{N}}$ 39'09		direct	-3618 Jul	22 j 18:29	11° $\mathring{\text{S}}$ 06'01	
conjunction	-3626 Oct	16 j 18:34	26° $\mathring{\text{N}}$ 07'58	2°06'55	conjunction	-3618 Nov	02 j 18:17	13° $\mathring{\text{S}}$ 34'09	1°50'39
minimum elong	-3626 Oct	16 j 18:34	26° $\mathring{\text{N}}$ 07'58	2°06'56	minimum elong	-3618 Nov	02 j 18:18	13° $\mathring{\text{S}}$ 34'09	1°50'38
max. Earth dist.	-3626 Oct	16 j 12:22	26° $\mathring{\text{N}}$ 07'23	31.26976 AU	max. Earth dist.	-3618 Nov	02 j 19:36	13° $\mathring{\text{S}}$ 34'16	31.22775 AU
retrograde	-3625 Jan	27 j 20:34	28° $\mathring{\text{N}}$ 36'24		retrograde	-3617 Feb	14 j 17:14	16° $\mathring{\text{S}}$ 03'47	
opposition	-3625 Apr	17 j 16:15	27° $\mathring{\text{N}}$ 13'46	2°14'51	opposition	-3617 May	05 j 23:49	14° $\mathring{\text{S}}$ 40'41	1°56'45
min. Earth dist.	-3625 Apr	17 j 22:35	27° $\mathring{\text{N}}$ 13'20	29.26783 AU	min. Earth dist.	-3617 May	05 j 21:14	14° $\mathring{\text{S}}$ 40'51	29.22689 AU
direct	-3625 Jul	07 j 10:02	25° $\mathring{\text{N}}$ 50'04		direct	-3617 Jul	25 j 04:27	13° $\mathring{\text{S}}$ 17'27	
conjunction	-3625 Oct	19 j 03:26	28° $\mathring{\text{N}}$ 18'45	2°05'30	conjunction	-3617 Nov	05 j 03:29	15° $\mathring{\text{S}}$ 45'32	1°47'52
minimum elong	-3625 Oct	19 j 03:27	28° $\mathring{\text{N}}$ 18'45	2°05'30	minimum elong	-3617 Nov	05 j 03:30	15° $\mathring{\text{S}}$ 45'32	1°47'49
max. Earth dist.	-3625 Oct	18 j 21:11	28° $\mathring{\text{N}}$ 18'09	31.26293 AU	max. Earth dist.	-3617 Nov	05 j 06:39	15° $\mathring{\text{S}}$ 45'50	31.22361 AU
retrograde	-3625 Dec	07 j 04:22	0° $\mathring{\text{S}}$		retrograde	-3616 Feb	17 j 03:20	18° $\mathring{\text{S}}$ 15'21	
opposition	-3624 Jan	30 j 09:00	0° $\mathring{\text{S}}$ 47'17		opposition	-3616 May	07 j 13:03	16° $\mathring{\text{S}}$ 52'13	1°53'40
min. Earth dist.	-3624 Mar	27 j 13:46	30° $\mathring{\text{N}}$		min. Earth dist.	-3616 May	07 j 10:02	16° $\mathring{\text{S}}$ 52'25	29.22223 AU
direct	-3624 Apr	19 j 05:11	29° $\mathring{\text{N}}$ 24'33	2°13'15	direct	-3616 Jul	26 j 15:53	15° $\mathring{\text{S}}$ 29'04	
conjunction	-3624 Apr	19 j 09:50	29° $\mathring{\text{N}}$ 24'14	29.26078 AU	conjunction	-3616 Nov	06 j 12:44	17° $\mathring{\text{S}}$ 57'05	1°44'54
retrograde	-3624 Jul	08 j 20:23	28° $\mathring{\text{N}}$ 00'51		minimum elong	-3616 Nov	06 j 12:45	17° $\mathring{\text{S}}$ 57'05	1°44'53
direct	-3624 Oct	07 j 11:34	0° $\mathring{\text{S}}$		max. Earth dist.	-3616 Nov	06 j 15:42	17° $\mathring{\text{S}}$ 57'22	31.21854 AU
conjunction	-3624 Oct	20 j 12:29	0° $\mathring{\text{S}}$ 29'25	2°03'54	retrograde	-3615 Feb	18 j 16:24	20° $\mathring{\text{S}}$ 27'04	
minimum elong	-3624 Oct	20 j 12:30	0° $\mathring{\text{S}}$ 29'25	2°03'55	opposition	-3615 May	10 j 02:06	19° $\mathring{\text{S}}$ 03'54	1°50'26
max. Earth dist.	-3624 Oct	20 j 07:59	0° $\mathring{\text{S}}$ 28'59	31.25581 AU	min. Earth dist.	-3615 May	09 j 21:42	19° $\mathring{\text{S}}$ 04'11	29.21651 AU

Attention, astronomical year style is used: The year -3615 in astronomical counting style is the year 3616 BCE in historical counting style.

direct	-3615 Jul 29 j 01:21	17° 4 40'48		direct	-3607 Aug 15 j 22:34	5° 1 13'40	
conjunction	-3615 Nov 08 j 22:10	20° 0 08'45	1°41'48	conjunction	-3607 Nov 26 j 01:14	7° 1 41'01	1°12'04
minimum elong	-3615 Nov 08 j 22:10	20° 0 08'45	1°41'45	minimum elong	-3607 Nov 26 j 01:14	7° 1 41'01	1°11'59
max. Earth dist.	-3615 Nov 09 j 02:18	20° 0 09'09	31.21207 AU	max. Earth dist.	-3607 Nov 26 j 12:24	7° 1 42'05	31.14420 AU
retrograde	-3614 Feb 21 j 03:41	22° 3 38'54		retrograde	-3606 Mar 11 j 03:50	10° 1 12'17	
opposition	-3614 May 12 j 15:22	21° 1 15'39	1°47'02	opposition	-3606 May 30 j 23:59	8° 1 48'20	1°14'43
min. Earth dist.	-3614 May 12 j 11:17	21° 1 15'56	29.20926 AU	min. Earth dist.	-3606 May 30 j 11:17	8° 1 49'12	29.14151 AU
direct	-3614 Jul 31 j 12:12	19° 4 52'35		direct	-3606 Aug 18 j 08:16	7° 1 25'26	
conjunction	-3614 Nov 11 j 07:30	22° 2 20'28	1°38'33	conjunction	-3606 Nov 28 j 10:47	9° 1 52'46	1°07'49
minimum elong	-3614 Nov 11 j 07:30	22° 2 20'28	1°38'30	minimum elong	-3606 Nov 28 j 10:48	9° 1 52'46	1°07'44
max. Earth dist.	-3614 Nov 11 j 12:05	22° 2 20'54	31.20425 AU	max. Earth dist.	-3606 Nov 28 j 23:23	9° 1 53'57	31.13778 AU
retrograde	-3613 Feb 23 j 16:58	24° 4 50'45		retrograde	-3605 Mar 13 j 15:12	12° 1 24'13	
opposition	-3613 May 15 j 04:28	23° 4 27'24	1°43'29	opposition	-3605 Jun 02 j 13:10	11° 1 00'14	1°10'06
min. Earth dist.	-3613 May 14 j 22:41	23° 4 27'47	29.20066 AU	min. Earth dist.	-3605 Jun 02 j 00:34	11° 1 01'06	29.13506 AU
direct	-3613 Aug 03 j 00:35	22° 2 04'21		direct	-3605 Aug 20 j 18:46	9° 1 37'24	
conjunction	-3613 Nov 13 j 16:52	24° 4 32'08	1°35'09	conjunction	-3605 Nov 30 j 20:34	12° 1 04'42	1°03'27
minimum elong	-3613 Nov 13 j 16:52	24° 4 32'08	1°35'05	minimum elong	-3605 Nov 30 j 20:34	12° 1 04'42	1°03'21
max. Earth dist.	-3613 Nov 13 j 22:02	24° 4 32'38	31.19513 AU	max. Earth dist.	-3605 Dec 01 j 09:53	12° 1 05'58	31.13136 AU
retrograde	-3612 Feb 26 j 05:50	27° 0 02'33		retrograde	-3604 Mar 15 j 04:55	14° 1 36'20	
opposition	-3612 May 16 j 17:46	25° 4 39'05	1°39'47	min. Earth dist.	-3604 Jun 03 j 11:57	13° 1 13'18	29.12833 AU
min. Earth dist.	-3612 May 16 j 12:12	25° 4 39'28	29.19113 AU	opposition	-3604 Jun 04 j 02:13	13° 1 12'20	1°05'23
direct	-3612 Aug 04 j 11:20	24° 4 16'02		direct	-3604 Aug 22 j 05:53	11° 1 49'33	
conjunction	-3612 Nov 15 j 02:12	26° 4 43'43	1°31'37	conjunction	-3604 Dec 02 j 06:24	14° 1 16'51	0°58'59
minimum elong	-3612 Nov 15 j 02:12	26° 4 43'43	1°31'34	minimum elong	-3604 Dec 02 j 06:25	14° 1 16'51	0°58'53
max. Earth dist.	-3612 Nov 15 j 08:46	26° 4 44'21	31.18545 AU	max. Earth dist.	-3604 Dec 02 j 20:04	14° 1 18'09	31.12421 AU
retrograde	-3611 Feb 27 j 17:00	29° 1 14'14		retrograde	-3604 Dec 21 j 11:23	15° 1 11'23	
opposition	-3611 May 19 j 06:50	27° 4 50'40	1°35'56	retrograde	-3603 Mar 17 j 18:13	16° 1 48'40	
min. Earth dist.	-3611 May 18 j 23:23	27° 4 51'10	29.18122 AU	opposition	-3603 Jun 06 j 15:27	15° 1 24'37	1°00'34
direct	-3611 Aug 07 j 00:12	26° 4 27'36		min. Earth dist.	-3603 Jun 06 j 01:42	15° 1 25'33	29.12071 AU
conjunction	-3611 Nov 17 j 11:30	28° 4 55'12	1°27'58	direct	-3603 Jun 21 j 23:32	15° 1 23'32	
minimum elong	-3611 Nov 17 j 11:30	28° 4 55'12	1°27'53	direct	-3603 Aug 24 j 15:43	14° 1 01'53	
max. Earth dist.	-3611 Nov 17 j 18:14	28° 4 55'50	31.17563 AU	direct	-3603 Oct 23 j 15:02	15° 1 15'02	
retrograde	-3611 Dec 16 j 21:45	0° 1 11'45		conjunction	-3603 Dec 04 j 16:32	16° 1 29'11	0°54'26
opposition	-3610 Mar 02 j 05:22	1° 1 25'50		minimum elong	-3603 Dec 04 j 16:32	16° 1 29'11	0°54'19
min. Earth dist.	-3610 May 21 j 19:50	0° 1 02'09	1°31'57	max. Earth dist.	-3603 Dec 05 j 07:14	16° 1 30'34	31.11604 AU
direct	-3610 May 21 j 12:04	0° 1 02'41	29.17166 AU	retrograde	-3602 Mar 20 j 06:47	19° 1 01'09	
retrograde	-3610 May 23 j 03:41	30° 1 37'41		opposition	-3602 Jun 09 j 04:24	17° 1 37'04	0°55'39
direct	-3610 Aug 09 j 11:39	28° 4 39'06		min. Earth dist.	-3602 Jun 08 j 13:14	17° 1 38'05	29.11177 AU
conjunction	-3610 Nov 19 j 20:57	1° 1 06'36	1°24'10	direct	-3602 Aug 27 j 04:09	16° 1 14'21	
minimum elong	-3610 Nov 19 j 20:58	1° 1 06'36	1°24'06	conjunction	-3602 Dec 07 j 02:36	18° 1 41'38	0°49'48
max. Earth dist.	-3610 Nov 20 j 05:49	1° 1 07'27	31.16644 AU	minimum elong	-3602 Dec 07 j 02:36	18° 1 41'38	0°49'42
retrograde	-3609 Mar 04 j 16:20	3° 1 37'22		max. Earth dist.	-3602 Dec 07 j 16:51	18° 1 42'59	31.10646 AU
opposition	-3609 May 24 j 08:53	2° 1 13'36	1°27'50	retrograde	-3601 Mar 22 j 20:48	21° 1 13'45	
min. Earth dist.	-3609 May 23 j 23:37	2° 1 14'13	29.16280 AU	opposition	-3601 Jun 11 j 17:38	19° 1 49'35	0°50'39
direct	-3609 Aug 12 j 00:47	0° 1 50'33		min. Earth dist.	-3601 Jun 11 j 02:42	19° 1 50'36	29.10155 AU
conjunction	-3609 Nov 22 j 06:10	3° 1 17'59	1°20'16	direct	-3601 Aug 29 j 15:28	18° 1 26'53	
minimum elong	-3609 Nov 22 j 06:11	3° 1 18'00	1°20'11	conjunction	-3601 Dec 09 j 12:45	20° 1 54'08	0°45'06
max. Earth dist.	-3609 Nov 22 j 15:10	3° 1 18'51	31.15816 AU	minimum elong	-3601 Dec 09 j 12:45	20° 1 54'08	0°44'59
retrograde	-3608 Mar 06 j 04:40	5° 1 48'55		max. Earth dist.	-3601 Dec 10 j 04:36	20° 1 55'38	31.09565 AU
opposition	-3608 May 25 j 22:01	4° 1 25'04	1°23'35	retrograde	-3600 Mar 24 j 08:56	23° 1 26'23	
min. Earth dist.	-3608 May 25 j 11:37	4° 1 25'46	29.15501 AU	opposition	-3600 Jun 13 j 06:43	22° 1 02'08	0°45'36
direct	-3608 Aug 13 j 10:54	3° 1 02'04		min. Earth dist.	-3600 Jun 12 j 14:52	22° 1 03'12	29.09009 AU
conjunction	-3608 Nov 23 j 15:44	5° 1 29'27	1°16'13	direct	-3600 Aug 31 j 04:51	20° 1 39'24	
minimum elong	-3608 Nov 23 j 15:45	5° 1 29'27	1°16'10	conjunction	-3600 Dec 10 j 22:54	23° 1 06'37	0°40'20
max. Earth dist.	-3608 Nov 24 j 02:46	5° 1 30'29	31.15079 AU	minimum elong	-3600 Dec 10 j 22:54	23° 1 06'37	0°40'14
retrograde	-3607 Mar 08 j 14:35	8° 1 00'32		max. Earth dist.	-3600 Dec 11 j 14:19	23° 1 08'05	31.08391 AU
opposition	-3607 May 28 j 10:59	6° 1 36'38	1°19'13	retrograde	-3599 Mar 26 j 21:35	25° 1 39'00	
min. Earth dist.	-3607 May 27 j 23:54	6° 1 37'23	29.14797 AU	opposition	-3599 Jun 15 j 19:36	24° 1 14'38	0°40'28
				min. Earth dist.	-3599 Jun 15 j 03:19	24° 1 15'45	29.07813 AU

Attention, astronomical year style is used: The year -3599 in astronomical counting style is the year 3600 BCE in historical counting style.

direct	-3599 Sep 02 j 15:18	22°M51'53		direct	-3592 Sep 17 j 18:50	8°Z20'09	
conjunction	-3599 Dec 13 j 09:09	25°M19'03	0°35'30	conjunction	-3592 Dec 28 j 10:21	10°Z47'21	0°00'36
minimum elong	-3599 Dec 13 j 09:09	25°M19'03	0°35'23	minimum elong	-3592 Dec 28 j 10:20	10°Z47'21	0°00'29
max. Earth dist.	-3599 Dec 14 j 02:12	25°M20'40	31.07182 AU	behind sun begin	-3592 Dec 28 j 03:55	10°Z46'47	
retrograde	-3598 Mar 29 j 07:41	27°M51'33		behind sun end	-3592 Dec 28 j 16:46	10°Z47'56	
opposition	-3598 Jun 18 j 08:30	26°M27'05	0°35'17	max. Earth dist.	-3592 Dec 29 j 08:55	10°Z49'29	31.00999 AU
min. Earth dist.	-3598 Jun 17 j 15:45	26°M28'14	29.06612 AU	desc. node	-3591 Feb 08 j 23:17	12°Z17'46	
direct	-3598 Sep 05 j 03:46	25°M04'19		retrograde	-3591 Apr 14 j 02:15	13°Z20'50	
				min. Earth dist.	-3591 Jul 03 j 04:00	11°Z57'31	29.00661 AU
conjunction	-3598 Dec 15 j 19:11	27°M31'27	0°30'38	opposition	-3591 Jul 04 j 01:50	11°Z56'01	0°-2'-8
minimum elong	-3598 Dec 15 j 19:11	27°M31'27	0°30'31	direct	-3591 Sep 20 j 07:20	10°Z33'18	
max. Earth dist.	-3598 Dec 16 j 12:24	27°M33'05	31.06018 AU				
	-3597 Mar 16 j 00:33	0°Z		conjunction	-3591 Dec 30 j 21:17	13°Z00'33	0°-4'-32
retrograde	-3597 Mar 31 j 21:11	0°Z04'04		minimum elong	-3591 Dec 30 j 21:18	13°Z00'33	0°04'41
	-3597 Apr 16 j 20:39	30°RM		behind sun begin	-3591 Dec 30 j 15:00	12°Z59'59	
opposition	-3597 Jun 20 j 21:22	28°M39'31	0°30'02	behind sun end	-3591 Dec 31 j 03:37	13°Z01'07	
min. Earth dist.	-3597 Jun 20 j 03:04	28°M40'46	29.05490 AU	max. Earth dist.	-3591 Dec 31 j 19:08	13°Z02'37	31.00264 AU
direct	-3597 Sep 07 j 14:12	27°M16'43		retrograde	-3590 Apr 16 j 16:19	15°Z34'09	
				opposition	-3590 Jul 06 j 14:38	14°Z09'18	0°-7'-33
conjunction	-3597 Dec 18 j 05:29	29°M43'50	0°25'43	min. Earth dist.	-3590 Jul 05 j 16:44	14°Z10'48	28.99893 AU
minimum elong	-3597 Dec 18 j 05:29	29°M43'50	0°25'35	direct	-3590 Sep 22 j 17:42	12°Z46'36	
max. Earth dist.	-3597 Dec 19 j 00:00	29°M45'35	31.04938 AU				
	-3597 Dec 25 j 08:12	0°Z		conjunction	-3589 Jan 02 j 08:25	15°Z13'52	0°-9'-35
retrograde	-3596 Apr 02 j 07:45	2°Z16'36		minimum elong	-3589 Jan 02 j 08:25	15°Z13'52	0°09'43
opposition	-3596 Jun 22 j 10:13	0°Z51'58	0°24'45	behind sun begin	-3589 Jan 02 j 03:06	15°Z13'23	
min. Earth dist.	-3596 Jun 21 j 15:56	0°Z53'13	29.04471 AU	behind sun end	-3589 Jan 02 j 13:44	15°Z14'21	
	-3596 Jul 26 j 14:19	30°RM		max. Earth dist.	-3589 Jan 03 j 07:23	15°Z16'02	30.99435 AU
direct	-3596 Sep 09 j 00:50	29°M29'10		retrograde	-3589 Apr 19 j 04:24	17°Z47'35	
	-3596 Oct 21 j 19:17	0°Z		min. Earth dist.	-3589 Jul 08 j 05:37	16°Z24'11	28.99009 AU
				opposition	-3589 Jul 09 j 03:27	16°Z22'41	0°-12'-58
conjunction	-3596 Dec 19 j 15:51	1°Z56'16	0°20'45	direct	-3589 Sep 25 j 06:41	14°Z59'58	
minimum elong	-3596 Dec 19 j 15:51	1°Z56'16	0°20'38				
max. Earth dist.	-3596 Dec 20 j 11:15	1°Z58'06	31.03988 AU	conjunction	-3588 Jan 04 j 19:41	17°Z27'15	0°-14'-37
retrograde	-3595 Apr 04 j 20:42	4°Z29'10		minimum elong	-3588 Jan 04 j 19:41	17°Z27'15	0°14'46
opposition	-3595 Jun 24 j 22:55	3°Z04'29	0°19'26	behind sun begin	-3588 Jan 04 j 17:00	17°Z27'01	
min. Earth dist.	-3595 Jun 24 j 02:50	3°Z05'51	29.03572 AU	behind sun end	-3588 Jan 04 j 22:21	17°Z27'30	
direct	-3595 Sep 11 j 11:28	1°Z41'41		max. Earth dist.	-3588 Jan 05 j 18:04	17°Z29'22	30.98508 AU
				retrograde	-3588 Apr 20 j 18:49	20°Z01'04	
conjunction	-3595 Dec 22 j 02:14	4°Z08'48	0°15'45	opposition	-3588 Jul 10 j 16:05	18°Z36'06	0°-18'-21
minimum elong	-3595 Dec 22 j 02:14	4°Z08'48	0°15'37	min. Earth dist.	-3588 Jul 09 j 17:32	18°Z37'39	28.98034 AU
behind sun begin	-3595 Dec 22 j 00:31	4°Z08'39		direct	-3588 Sep 26 j 17:52	17°Z13'20	
behind sun end	-3595 Dec 22 j 03:56	4°Z08'58					
max. Earth dist.	-3595 Dec 22 j 22:05	4°Z10'41	31.03134 AU	conjunction	-3587 Jan 06 j 07:03	19°Z40'38	0°-19'-38
retrograde	-3594 Apr 07 j 09:17	6°Z41'51		minimum elong	-3587 Jan 06 j 07:02	19°Z40'38	0°19'47
opposition	-3594 Jun 27 j 11:40	5°Z17'07	0°14'04	max. Earth dist.	-3587 Jan 07 j 05:58	19°Z42'48	30.97481 AU
min. Earth dist.	-3594 Jun 26 j 15:55	5°Z18'28	29.02774 AU	retrograde	-3587 Apr 23 j 05:29	22°Z14'32	
direct	-3594 Sep 13 j 20:09	3°Z54'20		min. Earth dist.	-3587 Jul 12 j 06:53	20°Z50'59	28.96978 AU
				opposition	-3587 Jul 13 j 04:45	20°Z49'29	0°-23'-43
conjunction	-3594 Dec 24 j 12:49	6°Z21'29	0°10'45	direct	-3587 Sep 29 j 05:05	19°Z26'41	
minimum elong	-3594 Dec 24 j 12:49	6°Z21'29	0°10'37				
behind sun begin	-3594 Dec 24 j 07:49	6°Z21'02		conjunction	-3586 Jan 08 j 18:22	21°Z53'58	0°-24'-38
behind sun end	-3594 Dec 24 j 17:50	6°Z21'56		minimum elong	-3586 Jan 08 j 18:22	21°Z53'58	0°24'48
max. Earth dist.	-3594 Dec 25 j 10:06	6°Z23'29	31.02386 AU	max. Earth dist.	-3586 Jan 09 j 17:42	21°Z56'10	30.96416 AU
retrograde	-3593 Apr 09 j 22:36	8°Z54'40		retrograde	-3586 Apr 25 j 18:11	24°Z27'56	
min. Earth dist.	-3593 Jun 29 j 02:59	7°Z31'22	29.02052 AU	opposition	-3586 Jul 15 j 17:08	23°Z02'48	0°-29'-2
opposition	-3593 Jun 30 j 00:23	7°Z29'54	0°08'41	min. Earth dist.	-3586 Jul 14 j 18:02	23°Z04'24	28.95915 AU
direct	-3593 Sep 16 j 08:18	6°Z07'10		direct	-3586 Oct 01 j 16:14	21°Z39'57	
conjunction	-3593 Dec 26 j 23:20	8°Z34'19	0°05'43	conjunction	-3585 Jan 11 j 05:42	24°Z07'15	0°-29'-35
minimum elong	-3593 Dec 26 j 23:21	8°Z34'19	0°05'35	minimum elong	-3585 Jan 11 j 05:42	24°Z07'15	0°29'44
behind sun begin	-3593 Dec 26 j 17:09	8°Z33'46		max. Earth dist.	-3585 Jan 12 j 05:06	24°Z09'28	30.95364 AU
behind sun end	-3593 Dec 27 j 05:32	8°Z34'53		retrograde	-3585 Apr 28 j 06:23	26°Z41'18	
max. Earth dist.	-3593 Dec 27 j 20:22	8°Z36'18	31.01689 AU	min. Earth dist.	-3585 Jul 17 j 07:12	25°Z17'39	28.94910 AU
retrograde	-3592 Apr 11 j 13:27	11°Z07'40		opposition	-3585 Jul 18 j 05:40	25°Z16'06	0°-34'-19
opposition	-3592 Jul 01 j 13:16	9°Z42'52	0°03'16	direct	-3585 Oct 04 j 01:22	23°Z53'12	
min. Earth dist.	-3592 Jun 30 j 16:07	9°Z44'19	29.01371 AU				

Attention, astronomical year style is used: The year -3584 in astronomical counting style is the year 3585 BCE in historical counting style.

conjunction	-3584 Jan 13 j 17:13	26° \mathring{A} 20'32	0°-34'-30	conjunction	-3576 Jan 31 j 17:27	14° \mathring{B} 12'03	-1°-11'-31
minimum elong	-3584 Jan 13 j 17:12	26° \mathring{A} 20'32	0°34'40	minimum elong	-3576 Jan 31 j 17:27	14° \mathring{B} 12'03	1°11'41
max. Earth dist.	-3584 Jan 14 j 17:49	26° \mathring{A} 22'51	30.94405 AU	max. Earth dist.	-3576 Feb 01 j 18:41	14° \mathring{B} 14'26	30.89769 AU
retrograde	-3584 Apr 29 j 19:22	28° \mathring{A} 54'39		retrograde	-3576 May 18 j 08:01	16° \mathring{B} 46'54	
opposition	-3584 Jul 19 j 17:58	27° \mathring{A} 29'24	0°-39'-33	opposition	-3576 Aug 06 j 19:59	15° \mathring{B} 21'38	-1°-18'-48
min. Earth dist.	-3584 Jul 18 j 18:05	27° \mathring{A} 31'03	28.94003 AU	min. Earth dist.	-3576 Aug 05 j 20:45	15° \mathring{B} 23'15	28.89515 AU
direct	-3584 Oct 05 j 13:35	26° \mathring{A} 06'28		direct	-3576 Oct 23 j 05:28	13° \mathring{B} 58'39	
conjunction	-3583 Jan 15 j 04:44	28° \mathring{A} 33'51	0°-39'-22	conjunction	-3575 Feb 02 j 06:17	16° \mathring{B} 26'42	-1°-15'-45
minimum elong	-3583 Jan 15 j 04:44	28° \mathring{A} 33'51	0°39'31	minimum elong	-3575 Feb 02 j 06:17	16° \mathring{B} 26'42	1°15'53
max. Earth dist.	-3583 Jan 16 j 04:49	28° \mathring{A} 36'07	30.93552 AU	max. Earth dist.	-3575 Feb 03 j 07:48	16° \mathring{B} 29'07	30.89073 AU
	-3583 Feb 24 j 11:59	0° \mathring{B}		retrograde	-3575 May 20 j 20:14	19° \mathring{B} 01'34	
retrograde	-3583 May 02 j 09:32	1° \mathring{B} 08'04		min. Earth dist.	-3575 Aug 08 j 08:05	17° \mathring{B} 37'55	28.88773 AU
	-3583 Jul 11 j 19:39	30° \mathring{R} \mathring{A}		opposition	-3575 Aug 09 j 07:55	17° \mathring{B} 36'16	-1°-23'-15
min. Earth dist.	-3583 Jul 21 j 06:40	29° \mathring{A} 44'24	28.93227 AU	direct	-3575 Oct 25 j 18:09	16° \mathring{B} 13'12	
opposition	-3583 Jul 22 j 06:12	29° \mathring{A} 42'47	0°-44'-44				
direct	-3583 Oct 07 j 23:34	28° \mathring{A} 19'49		conjunction	-3574 Feb 04 j 18:56	18° \mathring{B} 41'19	-1°-19'-51
	-3583 Dec 27 j 11:50	0° \mathring{B}		minimum elong	-3574 Feb 04 j 18:55	18° \mathring{B} 41'19	1°20'01
conjunction	-3582 Jan 17 j 16:30	0° \mathring{B} 47'17	0°-44'-11	max. Earth dist.	-3574 Feb 05 j 19:14	18° \mathring{B} 43'36	30.88297 AU
minimum elong	-3582 Jan 17 j 16:29	0° \mathring{B} 47'17	0°44'21	retrograde	-3574 May 23 j 09:12	21° \mathring{B} 16'11	
max. Earth dist.	-3582 Jan 18 j 18:09	0° \mathring{B} 49'42	30.92834 AU	opposition	-3574 Aug 11 j 20:03	19° \mathring{B} 50'49	-1°-27'-35
retrograde	-3582 May 04 j 22:22	3° \mathring{B} 21'35		min. Earth dist.	-3574 Aug 10 j 21:12	19° \mathring{B} 52'25	28.87992 AU
opposition	-3582 Jul 24 j 18:27	1° \mathring{B} 56'17	0°-49'-51	direct	-3574 Oct 28 j 04:01	18° \mathring{B} 27'41	
min. Earth dist.	-3582 Jul 23 j 18:02	1° \mathring{B} 57'59	28.92571 AU				
direct	-3582 Oct 10 j 11:35	0° \mathring{B} 33'20		conjunction	-3573 Feb 07 j 07:39	20° \mathring{B} 55'51	-1°-23'-50
conjunction	-3581 Jan 20 j 04:03	3° \mathring{B} 00'52	0°-48'-56	minimum elong	-3573 Feb 07 j 07:39	20° \mathring{B} 55'50	1°23'59
minimum elong	-3581 Jan 20 j 04:02	3° \mathring{B} 00'52	0°49'05	max. Earth dist.	-3573 Feb 08 j 09:00	20° \mathring{B} 58'14	30.87508 AU
max. Earth dist.	-3581 Jan 21 j 05:09	3° \mathring{B} 03'14	30.92242 AU	retrograde	-3573 May 25 j 21:41	23° \mathring{B} 30'43	
retrograde	-3581 May 07 j 13:08	5° \mathring{B} 35'17		min. Earth dist.	-3573 Aug 13 j 08:46	22° \mathring{B} 06'55	28.87215 AU
min. Earth dist.	-3581 Jul 26 j 06:15	4° \mathring{B} 11'41	28.92041 AU	opposition	-3573 Aug 14 j 07:58	22° \mathring{B} 05'17	-1°-31'-47
opposition	-3581 Jul 27 j 06:48	4° \mathring{B} 09'59	0°-54'-54	direct	-3573 Oct 30 j 16:05	20° \mathring{B} 42'04	
direct	-3581 Oct 12 j 21:43	2° \mathring{B} 47'02					
conjunction	-3580 Jan 22 j 16:03	5° \mathring{B} 14'40	0°-53'-37	conjunction	-3572 Feb 09 j 20:27	23° \mathring{B} 10'17	-1°-27'-42
minimum elong	-3580 Jan 22 j 16:03	5° \mathring{B} 14'40	0°53'47	minimum elong	-3572 Feb 09 j 20:27	23° \mathring{B} 10'16	1°27'51
max. Earth dist.	-3580 Jan 23 j 18:24	5° \mathring{B} 17'09	30.91744 AU	max. Earth dist.	-3572 Feb 10 j 20:42	23° \mathring{B} 12'33	30.86758 AU
retrograde	-3580 May 09 j 02:35	7° \mathring{B} 49'11		retrograde	-3572 May 27 j 12:02	25° \mathring{B} 45'08	
opposition	-3580 Jul 28 j 18:59	6° \mathring{B} 23'54	0°-59'-52	opposition	-3572 Aug 15 j 19:46	24° \mathring{B} 19'40	-1°-35'-50
min. Earth dist.	-3580 Jul 27 j 18:33	6° \mathring{B} 25'36	28.91580 AU	min. Earth dist.	-3572 Aug 14 j 20:54	24° \mathring{B} 21'16	28.86516 AU
direct	-3580 Oct 14 j 10:29	5° \mathring{B} 00'58		direct	-3572 Nov 01 j 02:53	22° \mathring{B} 56'22	
conjunction	-3579 Jan 24 j 04:09	7° \mathring{B} 28'42	0°-58'-14	conjunction	-3571 Feb 11 j 09:27	25° \mathring{B} 24'39	-1°-31'-26
minimum elong	-3579 Jan 24 j 04:09	7° \mathring{B} 28'42	0°58'23	minimum elong	-3571 Feb 11 j 09:27	25° \mathring{B} 24'39	1°31'34
max. Earth dist.	-3579 Jan 25 j 05:54	7° \mathring{B} 31'08	30.91309 AU	max. Earth dist.	-3571 Feb 12 j 10:38	25° \mathring{B} 27'01	30.86090 AU
retrograde	-3579 May 11 j 17:44	10° \mathring{B} 03'20		retrograde	-3571 May 30 j 01:05	27° \mathring{B} 59'30	
min. Earth dist.	-3579 Jul 30 j 06:13	8° \mathring{B} 39'48	28.91156 AU	min. Earth dist.	-3571 Aug 17 j 08:55	26° \mathring{B} 35'35	28.85909 AU
opposition	-3579 Jul 31 j 07:11	8° \mathring{B} 38'04	-1°-4'-45	opposition	-3571 Aug 18 j 07:33	26° \mathring{B} 33'59	-1°-39'-45
direct	-3579 Oct 16 j 21:40	7° \mathring{B} 15'08		direct	-3571 Nov 03 j 15:55	25° \mathring{B} 10'38	
conjunction	-3578 Jan 26 j 16:23	9° \mathring{B} 42'58	-1°-2'-45	conjunction	-3570 Feb 13 j 22:16	27° \mathring{B} 38'59	-1°-35'-2
minimum elong	-3578 Jan 26 j 16:22	9° \mathring{B} 42'58	1°02'55	minimum elong	-3570 Feb 13 j 22:15	27° \mathring{B} 38'59	1°35'10
max. Earth dist.	-3578 Jan 27 j 18:28	9° \mathring{B} 45'26	30.90858 AU	max. Earth dist.	-3570 Feb 14 j 22:41	27° \mathring{B} 41'17	30.85545 AU
retrograde	-3578 May 14 j 05:17	12° \mathring{B} 17'42			-3570 May 03 j 09:10	0° \approx	
opposition	-3578 Aug 02 j 19:28	10° \mathring{B} 52'27	-1°-9'-32	retrograde	-3570 Jun 01 j 15:29	0° \approx 13'51	
min. Earth dist.	-3578 Aug 01 j 19:29	10° \mathring{B} 54'07	28.90691 AU		-3570 Jul 01 j 03:56	30° \mathring{R} \mathring{B}	
direct	-3578 Oct 19 j 08:43	9° \mathring{B} 29'32		opposition	-3570 Aug 20 j 19:17	28° \mathring{B} 48'19	-1°-43'-31
conjunction	-3577 Jan 29 j 04:53	11° \mathring{B} 57'27	-1°-7'-11	min. Earth dist.	-3570 Aug 19 j 20:06	28° \mathring{B} 49'57	28.85436 AU
minimum elong	-3577 Jan 29 j 04:53	11° \mathring{B} 57'27	1°07'20	direct	-3570 Nov 06 j 03:25	27° \mathring{B} 24'55	
max. Earth dist.	-3577 Jan 30 j 06:49	11° \mathring{B} 59'54	30.90366 AU				
retrograde	-3577 May 16 j 19:22	14° \mathring{B} 32'15		conjunction	-3569 Feb 16 j 11:20	29° \mathring{B} 53'22	-1°-38'-29
min. Earth dist.	-3577 Aug 04 j 07:01	13° \mathring{B} 08'42	28.90158 AU	minimum elong	-3569 Feb 16 j 11:19	29° \mathring{B} 53'21	1°38'36
opposition	-3577 Aug 05 j 07:39	13° \mathring{B} 07'00	-1°-14'-13	max. Earth dist.	-3569 Feb 17 j 12:09	29° \mathring{B} 55'42	30.85125 AU
direct	-3577 Oct 21 j 20:03	11° \mathring{B} 44'03			-3569 Feb 19 j 09:57	0° \approx	
				retrograde	-3569 Jun 04 j 04:01	2° \approx 28'14	
				min. Earth dist.	-3569 Aug 22 j 08:41	1° \approx 04'17	28.85087 AU
				opposition	-3569 Aug 23 j 07:00	1° \approx 02'43	-1°-47'-8
					-3569 Oct 04 j 06:28	30° \mathring{R} \mathring{B}	
				direct	-3569 Nov 08 j 14:47	29° \mathring{B} 39'17	

Attention, astronomical year style is used: The year -3569 in astronomical counting style is the year 3570 BCE in historical counting style.

	-3569 Dec 13 j 06:05	0°		direct	-3561 Nov 26 j 09:34	17°	38'51"		
conjunction	-3568 Feb 19 j 00:32	2°	07'50"	-1°-41'-47"	conjunction	-3560 Mar 08 j 14:24	20°	08'17"	-2°-2'-15"
minimum elong	-3568 Feb 19 j 00:32	2°	07'50"	1°41'55"	minimum elong	-3560 Mar 08 j 14:24	20°	08'17"	2°02'22"
max. Earth dist.	-3568 Feb 20 j 01:11	2°	10'09"	30.84840 AU	max. Earth dist.	-3560 Mar 09 j 10:20	20°	10'09"	30.82386 AU
retrograde	-3568 Jun 05 j 18:55	4°	42'43"		retrograde	-3560 Jun 24 j 03:33	22°	43'00"	
opposition	-3568 Aug 24 j 18:36	3°	17'14"	-1°-50'-34"	opposition	-3560 Sep 11 j 14:36	21°	17'38"	-2°-11'-43"
min. Earth dist.	-3568 Aug 23 j 19:35	3°	18'51"	28.84850 AU	min. Earth dist.	-3560 Sep 10 j 21:27	21°	18'51"	28.82340 AU
direct	-3568 Nov 10 j 02:38	1°	53'47"		direct	-3560 Nov 27 j 21:53	19°	53'47"	
conjunction	-3567 Feb 20 j 13:51	4°	22'28"	-1°-44'-55"	conjunction	-3559 Mar 11 j 04:22	22°	23'17"	-2°-4'00"
minimum elong	-3567 Feb 20 j 13:51	4°	22'28"	1°45'03"	minimum elong	-3559 Mar 11 j 04:21	22°	23'17"	2°04'06"
max. Earth dist.	-3567 Feb 21 j 13:58	4°	24'44"	30.84628 AU	max. Earth dist.	-3559 Mar 11 j 23:37	22°	25'06"	30.82012 AU
retrograde	-3567 Jun 08 j 07:24	6°	57'23"		retrograde	-3559 Jun 26 j 18:25	24°	57'56"	
min. Earth dist.	-3567 Aug 26 j 08:38	5°	33'27"	28.84678 AU	min. Earth dist.	-3559 Sep 13 j 08:00	23°	33'48"	28.82020 AU
opposition	-3567 Aug 27 j 06:13	5°	31'56"	-1°-53'-51"	opposition	-3559 Sep 14 j 01:38	23°	32'33"	-2°-13'-29"
direct	-3567 Nov 12 j 12:16	4°	08'29"		direct	-3559 Nov 30 j 10:53	22°	08'37"	
conjunction	-3566 Feb 23 j 03:23	6°	37'17"	-1°-47'-55"	conjunction	-3558 Mar 13 j 18:17	24°	38'13"	-2°-5'-35"
minimum elong	-3566 Feb 23 j 03:23	6°	37'17"	1°48'03"	minimum elong	-3558 Mar 13 j 18:17	24°	38'13"	2°05'41"
max. Earth dist.	-3566 Feb 24 j 03:43	6°	39'34"	30.84473 AU	max. Earth dist.	-3558 Mar 14 j 12:58	24°	39'58"	30.81745 AU
retrograde	-3566 Jun 10 j 20:11	9°	12'13"		retrograde	-3558 Jun 29 j 06:17	27°	12'47"	
opposition	-3566 Aug 29 j 17:45	7°	46'50"	-1°-56'-57"	opposition	-3558 Sep 16 j 12:50	25°	47'24"	-2°-15'-4"
min. Earth dist.	-3566 Aug 28 j 19:44	7°	48'23"	28.84523 AU	min. Earth dist.	-3558 Sep 15 j 20:34	25°	48'34"	28.81835 AU
direct	-3566 Nov 15 j 00:26	6°	23'22"		direct	-3558 Dec 02 j 21:35	24°	23'25"	
conjunction	-3565 Feb 25 j 16:51	8°	52'17"	-1°-50'-44"	conjunction	-3557 Mar 16 j 08:16	26°	53'05"	-2°-6'-57"
minimum elong	-3565 Feb 25 j 16:51	8°	52'17"	1°50'51"	minimum elong	-3557 Mar 16 j 08:16	26°	53'05"	2°07'02"
max. Earth dist.	-3565 Feb 26 j 15:41	8°	54'26"	30.84297 AU	max. Earth dist.	-3557 Mar 17 j 03:06	26°	54'51"	30.81636 AU
retrograde	-3565 Jun 13 j 09:19	11°	27'15"		retrograde	-3557 Jul 01 j 19:03	29°	27'35"	
min. Earth dist.	-3565 Aug 31 j 08:52	10°	03'21"	28.84330 AU	opposition	-3557 Sep 18 j 23:50	28°	02'14"	-2°-16'-26"
opposition	-3565 Sep 01 j 05:29	10°	01'54"	-1°-59'-53"	min. Earth dist.	-3557 Sep 18 j 07:01	28°	03'26"	28.81796 AU
direct	-3565 Nov 17 j 09:54	8°	38'25"		direct	-3557 Dec 05 j 10:05	26°	38'11"	
conjunction	-3564 Feb 28 j 06:49	11°	07'28"	-1°-53'-23"	conjunction	-3556 Mar 17 j 22:19	29°	07'59"	-2°-8'-8"
minimum elong	-3564 Feb 28 j 06:49	11°	07'28"	1°53'31"	minimum elong	-3556 Mar 17 j 22:20	29°	07'59"	2°08'14"
max. Earth dist.	-3564 Feb 29 j 05:56	11°	09'38"	30.84056 AU	max. Earth dist.	-3556 Mar 18 j 15:47	29°	09'37"	30.81669 AU
retrograde	-3564 Jun 14 j 22:03	13°	42'25"			-3556 Apr 10 j 12:46	0°	00'00"	
opposition	-3564 Sep 02 j 16:56	12°	17'06"	-2°-2'-38"	retrograde	-3556 Jul 03 j 08:05	1°	42'24"	
min. Earth dist.	-3564 Sep 01 j 20:36	12°	18'32"	28.84039 AU	opposition	-3556 Sep 20 j 10:51	0°	17'06"	-2°-17'-35"
direct	-3564 Nov 18 j 21:35	10°	53'33"		min. Earth dist.	-3556 Sep 19 j 19:14	0°	18'12"	28.81909 AU
						-3556 Sep 30 j 13:12	30°	00'00"	
conjunction	-3563 Mar 01 j 20:40	13°	22'43"	-1°-55'-52"	direct	-3556 Dec 06 j 19:31	28°	53'01"	
minimum elong	-3563 Mar 01 j 20:40	13°	22'43"	1°55'59"		-3555 Feb 09 j 12:17	0°	00'00"	
max. Earth dist.	-3563 Mar 02 j 17:51	13°	24'43"	30.83718 AU					
	-3563 Apr 17 j 11:38	15°	00'00"		conjunction	-3555 Mar 20 j 12:35	1°	22'55"	-2°-9'-7"
retrograde	-3563 Jun 17 j 12:00	15°	57'39"		minimum elong	-3555 Mar 20 j 12:35	1°	22'55"	2°09'12"
	-3563 Aug 19 j 12:51	15°	00'00"		max. Earth dist.	-3555 Mar 21 j 06:33	1°	24'36"	30.81847 AU
min. Earth dist.	-3563 Sep 04 j 09:10	14°	33'41"	28.83663 AU	retrograde	-3555 Jul 05 j 19:54	3°	57'16"	
opposition	-3563 Sep 05 j 04:33	14°	32'19"	-2°-5'-11"	opposition	-3555 Sep 22 j 21:50	2°	32'02"	-2°-18'-32"
direct	-3563 Nov 21 j 08:34	13°	08'43"		min. Earth dist.	-3555 Sep 22 j 06:15	2°	33'08"	28.82137 AU
	-3562 Feb 15 j 09:43	15°	00'00"		direct	-3555 Dec 09 j 07:04	1°	07'56"	
conjunction	-3562 Mar 04 j 10:31	15°	37'59"	-1°-58'-11"	conjunction	-3554 Mar 23 j 02:35	3°	37'56"	-2°-9'-54"
minimum elong	-3562 Mar 04 j 10:31	15°	37'59"	1°58'18"	minimum elong	-3554 Mar 23 j 02:35	3°	37'56"	2°10'00"
max. Earth dist.	-3562 Mar 05 j 08:02	15°	40'00"	30.83292 AU	max. Earth dist.	-3554 Mar 23 j 18:53	3°	39'28"	30.82125 AU
retrograde	-3562 Jun 20 j 00:36	18°	12'51"		retrograde	-3554 Jul 08 j 08:34	6°	12'14"	
opposition	-3562 Sep 07 j 16:02	16°	47'31"	-2°-7'-34"	opposition	-3554 Sep 25 j 08:52	4°	47'05"	-2°-19'-16"
min. Earth dist.	-3562 Sep 06 j 21:29	16°	48'50"	28.83209 AU	min. Earth dist.	-3554 Sep 24 j 18:10	4°	48'07"	28.82451 AU
direct	-3562 Nov 23 j 21:49	15°	23'50"		direct	-3554 Dec 11 j 17:37	3°	22'57"	
conjunction	-3561 Mar 07 j 00:24	17°	53'11"	-2°00'-18"	conjunction	-3553 Mar 25 j 17:04	5°	53'06"	-2°-10'-30"
minimum elong	-3561 Mar 07 j 00:23	17°	53'11"	2°00'25"	minimum elong	-3553 Mar 25 j 17:04	5°	53'06"	2°10'34"
max. Earth dist.	-3561 Mar 07 j 20:23	17°	55'03"	30.82835 AU	max. Earth dist.	-3553 Mar 26 j 09:38	5°	54'39"	30.82445 AU
retrograde	-3561 Jun 22 j 14:45	20°	27'59"		retrograde	-3553 Jul 10 j 20:21	8°	27'19"	
min. Earth dist.	-3561 Sep 09 j 08:52	19°	03'56"	28.82758 AU	opposition	-3553 Sep 27 j 19:48	7°	02'13"	-2°-19'-47"
opposition	-3561 Sep 10 j 03:18	19°	02'38"	-2°-9'-44"	min. Earth dist.	-3553 Sep 27 j 06:13	7°	03'11"	28.82766 AU

Attention, astronomical year style is used: The year -3553 in astronomical counting style is the year 3554 BCE in historical counting style.

direct	-3553 Dec 14 j 05:39	5° ✕ 38'04		minimum elong	-3544 Apr 15 j 03:57	26° ✕ 08'13	2°06'53
				max. Earth dist.	-3544 Apr 15 j 11:57	26° ✕ 08'58	30.84291 AU
conjunction	-3552 Mar 27 j 07:35	8° ✕ 08'20	-2°-10'-53	retrograde	-3544 Jul 30 j 13:06	28° ✕ 41'18	
minimum elong	-3552 Mar 27 j 07:35	8° ✕ 08'20	2°10'57	opposition	-3544 Oct 16 j 20:38	27° ✕ 16'34	-2°-14'-55
max. Earth dist.	-3552 Mar 27 j 22:06	8° ✕ 09'42	30.82749 AU	min. Earth dist.	-3544 Oct 16 j 14:25	27° ✕ 17'01	28.84712 AU
retrograde	-3552 Jul 12 j 10:37	10° ✕ 42'29		direct	-3543 Jan 02 j 16:50	25° ✕ 51'53	
opposition	-3552 Sep 29 j 06:47	9° ✕ 17'27	-2°-20'-5				
min. Earth dist.	-3552 Sep 28 j 17:39	9° ✕ 18'23	28.83041 AU	conjunction	-3543 Apr 17 j 18:16	28° ✕ 22'56	-2°-5'-28
direct	-3552 Dec 15 j 16:58	7° ✕ 53'15		minimum elong	-3543 Apr 17 j 18:16	28° ✕ 22'56	2°05'29
				max. Earth dist.	-3543 Apr 18 j 00:32	28° ✕ 23'31	30.84879 AU
conjunction	-3551 Mar 29 j 22:10	10° ✕ 23'37	-2°-11'-4		-3543 Jun 03 j 15:00	0° ✕	
minimum elong	-3551 Mar 29 j 22:10	10° ✕ 23'37	2°11'07	retrograde	-3543 Aug 02 j 02:17	0° ✕ 55'54	
max. Earth dist.	-3551 Mar 30 j 12:10	10° ✕ 24'56	30.82971 AU		-3543 Oct 02 j 03:27	30° ✕	
retrograde	-3551 Jul 14 j 22:50	12° ✕ 57'40		opposition	-3543 Oct 19 j 07:09	29° ✕ 31'16	-2°-13'-20
opposition	-3551 Oct 01 j 17:47	11° ✕ 32'40	-2°-20'-11	min. Earth dist.	-3543 Oct 19 j 01:01	29° ✕ 31'42	28.85366 AU
min. Earth dist.	-3551 Oct 01 j 06:24	11° ✕ 33'29	28.83222 AU	direct	-3542 Jan 05 j 03:26	28° ✕ 06'34	
direct	-3551 Dec 18 j 05:35	10° ✕ 08'25			-3542 Apr 03 j 07:39	0° ✕	
conjunction	-3550 Apr 01 j 12:46	12° ✕ 38'53	-2°-11'-3	conjunction	-3542 Apr 20 j 08:50	0° ✕ 37'44	-2°-3'-53
minimum elong	-3550 Apr 01 j 12:46	12° ✕ 38'53	2°11'07	minimum elong	-3542 Apr 20 j 08:50	0° ✕ 37'44	2°03'55
max. Earth dist.	-3550 Apr 02 j 01:15	12° ✕ 40'03	30.83126 AU	max. Earth dist.	-3542 Apr 20 j 15:06	0° ✕ 38'19	30.85589 AU
retrograde	-3550 Jul 17 j 13:14	15° ✕ 12'48		retrograde	-3542 Aug 04 j 13:37	3° ✕ 10'35	
opposition	-3550 Oct 04 j 04:37	13° ✕ 47'49	-2°-20'-3	opposition	-3542 Oct 21 j 17:42	1° ✕ 46'03	-2°-11'-32
min. Earth dist.	-3550 Oct 03 j 17:17	13° ✕ 48'38	28.83336 AU	min. Earth dist.	-3542 Oct 21 j 13:07	1° ✕ 46'23	28.86118 AU
direct	-3550 Dec 20 j 19:05	12° ✕ 23'30		direct	-3541 Jan 07 j 15:51	0° ✕ 21'22	
conjunction	-3549 Apr 04 j 03:18	14° ✕ 54'03	-2°-10'-51	conjunction	-3541 Apr 22 j 23:23	2° ✕ 52'39	-2°-2'-7
minimum elong	-3549 Apr 04 j 03:19	14° ✕ 54'03	2°10'54	minimum elong	-3541 Apr 22 j 23:23	2° ✕ 52'39	2°02'08
max. Earth dist.	-3549 Apr 04 j 14:43	14° ✕ 55'07	30.83210 AU	max. Earth dist.	-3541 Apr 23 j 04:08	2° ✕ 53'06	30.86385 AU
retrograde	-3549 Jul 20 j 01:10	17° ✕ 27'50		retrograde	-3541 Aug 07 j 03:27	5° ✕ 25'24	
opposition	-3549 Oct 06 j 15:32	16° ✕ 02'53	-2°-19'-44	opposition	-3541 Oct 24 j 04:11	4° ✕ 00'58	-2°-9'-32
min. Earth dist.	-3549 Oct 06 j 06:11	16° ✕ 03'33	28.83405 AU	min. Earth dist.	-3541 Oct 23 j 23:39	4° ✕ 01'17	28.86913 AU
direct	-3549 Dec 23 j 06:42	14° ✕ 38'29		direct	-3540 Jan 10 j 05:12	2° ✕ 36'17	
conjunction	-3548 Apr 05 j 17:59	17° ✕ 09'06	-2°-10'-26	conjunction	-3540 Apr 24 j 14:06	5° ✕ 07'41	-2°00'-9
minimum elong	-3548 Apr 05 j 18:00	17° ✕ 09'06	2°10'29	minimum elong	-3540 Apr 24 j 14:07	5° ✕ 07'41	2°00'09
max. Earth dist.	-3548 Apr 06 j 04:47	17° ✕ 10'06	30.83281 AU	max. Earth dist.	-3540 Apr 24 j 17:51	5° ✕ 08'02	30.87166 AU
retrograde	-3548 Jul 21 j 14:24	19° ✕ 42'43		retrograde	-3540 Aug 08 j 15:26	7° ✕ 40'19	
opposition	-3548 Oct 08 j 02:07	18° ✕ 17'48	-2°-19'-11	opposition	-3540 Oct 25 j 14:48	6° ✕ 15'59	-2°-7'-21
min. Earth dist.	-3548 Oct 07 j 16:42	18° ✕ 18'28	28.83474 AU	min. Earth dist.	-3540 Oct 25 j 12:23	6° ✕ 16'09	28.87675 AU
direct	-3548 Dec 24 j 19:55	16° ✕ 53'19		direct	-3539 Jan 11 j 16:40	4° ✕ 51'17	
conjunction	-3547 Apr 08 j 08:28	19° ✕ 24'01	-2°-9'-50	conjunction	-3539 Apr 27 j 04:50	7° ✕ 22'47	-1°-58'00
minimum elong	-3547 Apr 08 j 08:28	19° ✕ 24'01	2°09'53	minimum elong	-3539 Apr 27 j 04:50	7° ✕ 22'47	1°58'00
max. Earth dist.	-3547 Apr 08 j 17:39	19° ✕ 24'52	30.83373 AU	max. Earth dist.	-3539 Apr 27 j 07:32	7° ✕ 23'02	30.87902 AU
retrograde	-3547 Jul 24 j 03:15	21° ✕ 57'29		retrograde	-3539 Aug 11 j 05:20	9° ✕ 55'16	
opposition	-3547 Oct 10 j 12:53	20° ✕ 32'35	-2°-18'-26	opposition	-3539 Oct 28 j 01:22	8° ✕ 31'01	-2°-4'-57
min. Earth dist.	-3547 Oct 10 j 04:54	20° ✕ 33'10	28.83609 AU	min. Earth dist.	-3539 Oct 27 j 23:08	8° ✕ 31'10	28.88355 AU
direct	-3547 Dec 27 j 06:18	19° ✕ 08'03		direct	-3538 Jan 14 j 06:22	7° ✕ 06'17	
conjunction	-3546 Apr 10 j 22:53	21° ✕ 38'49	-2°-9'-2	conjunction	-3538 Apr 29 j 19:21	9° ✕ 37'52	-1°-55'-41
minimum elong	-3546 Apr 10 j 22:53	21° ✕ 38'49	2°09'04	minimum elong	-3538 Apr 29 j 19:22	9° ✕ 37'52	1°55'41
max. Earth dist.	-3546 Apr 11 j 08:18	21° ✕ 39'41	30.83554 AU	max. Earth dist.	-3538 Apr 29 j 20:08	9° ✕ 37'56	30.88535 AU
retrograde	-3546 Jul 26 j 14:20	24° ✕ 12'09		retrograde	-3538 Aug 13 j 18:21	12° ✕ 10'11	
opposition	-3546 Oct 12 j 23:30	22° ✕ 47'17	-2°-17'-28	opposition	-3538 Oct 30 j 12:04	10° ✕ 45'59	-2°-2'-23
min. Earth dist.	-3546 Oct 12 j 15:38	22° ✕ 47'51	28.83836 AU	min. Earth dist.	-3538 Oct 30 j 11:40	10° ✕ 46'01	28.88940 AU
direct	-3546 Dec 29 j 18:39	21° ✕ 22'41		direct	-3537 Jan 16 j 18:06	9° ✕ 21'13	
conjunction	-3545 Apr 13 j 13:18	23° ✕ 53'31	-2°-8'-2	conjunction	-3537 May 02 j 10:07	11° ✕ 52'51	-1°-53'-12
minimum elong	-3545 Apr 13 j 13:18	23° ✕ 53'32	2°08'04	minimum elong	-3537 May 02 j 10:08	11° ✕ 52'51	1°53'11
max. Earth dist.	-3545 Apr 13 j 20:54	23° ✕ 54'14	30.83851 AU	max. Earth dist.	-3537 May 02 j 10:24	11° ✕ 52'53	30.89077 AU
retrograde	-3545 Jul 29 j 02:11	26° ✕ 26'44		retrograde	-3537 Aug 16 j 05:17	14° ✕ 24'59	
opposition	-3545 Oct 15 j 10:01	25° ✕ 01'56	-2°-16'-18	opposition	-3537 Nov 01 j 22:28	13° ✕ 00'50	-1°-59'-37
min. Earth dist.	-3545 Oct 15 j 03:00	25° ✕ 02'26	28.84207 AU	min. Earth dist.	-3537 Nov 01 j 22:44	13° ✕ 00'49	28.89424 AU
direct	-3544 Jan 01 j 05:14	23° ✕ 37'17		direct	-3536 Jan 19 j 07:31	11° ✕ 36'00	
conjunction	-3544 Apr 15 j 03:56	26° ✕ 08'13	-2°-6'-51	conjunction	-3536 May 04 j 00:42	14° ✕ 07'40	-1°-50'-32

Attention, astronomical year style is used: The year -3536 in astronomical counting style is the year 3537 BCE in historical counting style.

minimum elong	-3536 May 04 j 00:42	14° Υ 07'40	1°50'31	conjunction	-3528 May 22 j 18:39	2° 8 00'21	-1°-23'-43
max. Earth dist.	-3536 May 03 j 22:39	14° Υ 07'29	30.89538 AU	minimum elong	-3528 May 22 j 18:40	2° 8 00'21	1°23'40
retrograde	-3536 Aug 17 j 17:17	16° Υ 39'36		max. Earth dist.	-3528 May 22 j 10:41	1° 8 59'37	30.95164 AU
opposition	-3536 Nov 03 j 08:59	15° Υ 15'30	-1°-56'-42	retrograde	-3528 Sep 04 j 12:23	4° 8 30'56	
min. Earth dist.	-3536 Nov 03 j 10:27	15° Υ 15'23	28.89864 AU	opposition	-3528 Nov 20 j 19:36	3° 8 07'23	-1°-27'-24
direct	-3535 Jan 20 j 18:45	13° Υ 50'35		min. Earth dist.	-3528 Nov 21 j 03:03	3° 8 06'51	28.95719 AU
				direct	-3527 Feb 07 j 21:23	1° 8 42'14	
conjunction	-3535 May 06 j 15:10	16° Υ 22'17	-1°-47'-43				
minimum elong	-3535 May 06 j 15:10	16° Υ 22'17	1°47'42	conjunction	-3527 May 25 j 08:33	4° 8 14'22	-1°-19'-44
max. Earth dist.	-3535 May 06 j 13:15	16° Υ 22'06	30.89967 AU	minimum elong	-3527 May 25 j 08:34	4° 8 14'22	1°19'41
retrograde	-3535 Aug 20 j 03:34	18° Υ 54'01		max. Earth dist.	-3527 May 24 j 22:30	4° 8 13'26	30.96140 AU
opposition	-3535 Nov 05 j 19:26	17° Υ 29'56	-1°-53'-35	retrograde	-3527 Sep 07 j 00:47	6° 8 44'49	
min. Earth dist.	-3535 Nov 05 j 22:01	17° Υ 29'45	28.90286 AU	opposition	-3527 Nov 23 j 06:02	5° 8 21'22	-1°-23'-5
direct	-3534 Jan 23 j 06:44	16° Υ 04'56		min. Earth dist.	-3527 Nov 23 j 14:35	5° 8 20'46	28.96667 AU
				direct	-3526 Feb 10 j 08:33	3° 8 56'13	
conjunction	-3534 May 09 j 05:27	18° Υ 36'39	-1°-44'-44				
minimum elong	-3534 May 09 j 05:28	18° Υ 36'39	1°44'42	conjunction	-3526 May 27 j 22:44	6° 8 28'26	-1°-15'-39
max. Earth dist.	-3534 May 09 j 01:32	18° Υ 36'17	30.90418 AU	minimum elong	-3526 May 27 j 22:44	6° 8 28'26	1°15'35
retrograde	-3534 Aug 22 j 15:11	21° Υ 08'11		max. Earth dist.	-3526 May 27 j 12:37	6° 8 27'29	30.97043 AU
opposition	-3534 Nov 08 j 05:39	19° Υ 44'08	-1°-50'-19	retrograde	-3526 Sep 09 j 11:18	8° 8 58'43	
min. Earth dist.	-3534 Nov 08 j 08:30	19° Υ 43'56	28.90763 AU	opposition	-3526 Nov 25 j 16:25	7° 8 35'21	-1°-18'-39
direct	-3533 Jan 25 j 17:59	18° Υ 19'04		min. Earth dist.	-3526 Nov 26 j 02:20	7° 8 34'39	28.97510 AU
				direct	-3525 Feb 12 j 20:32	6° 8 10'11	
conjunction	-3533 May 11 j 19:52	20° Υ 50'49	-1°-41'-36				
minimum elong	-3533 May 11 j 19:53	20° Υ 50'49	1°41'34	conjunction	-3525 May 30 j 12:44	8° 8 42'26	-1°-11'-27
max. Earth dist.	-3533 May 11 j 15:57	20° Υ 50'27	30.90929 AU	minimum elong	-3525 May 30 j 12:44	8° 8 42'26	1°11'23
retrograde	-3533 Aug 25 j 00:41	23° Υ 22'10		max. Earth dist.	-3525 May 30 j 00:17	8° 8 41'17	30.97845 AU
opposition	-3533 Nov 10 j 16:04	21° Υ 58'09	-1°-46'-53	retrograde	-3525 Sep 11 j 22:39	11° 8 12'34	
min. Earth dist.	-3533 Nov 10 j 20:23	21° Υ 57'51	28.91315 AU	opposition	-3525 Nov 28 j 02:48	9° 8 49'16	-1°-14'-6
direct	-3532 Jan 28 j 06:29	20° Υ 33'01		min. Earth dist.	-3525 Nov 28 j 13:09	9° 8 48'32	28.98260 AU
				direct	-3524 Feb 15 j 08:03	8° 8 24'04	
conjunction	-3532 May 13 j 10:03	23° Υ 04'48	-1°-38'-18				
minimum elong	-3532 May 13 j 10:04	23° Υ 04'48	1°38'16	conjunction	-3524 Jun 01 j 02:43	10° 8 56'20	-1°-7'-8
max. Earth dist.	-3532 May 13 j 04:40	23° Υ 04'18	30.91548 AU	minimum elong	-3524 Jun 01 j 02:43	10° 8 56'21	1°07'04
retrograde	-3532 Aug 26 j 13:00	25° Υ 35'58		max. Earth dist.	-3524 May 31 j 14:05	10° 8 55'10	30.98545 AU
opposition	-3532 Nov 12 j 02:16	24° Υ 12'01	-1°-43'-17	retrograde	-3524 Sep 13 j 07:24	13° 8 26'17	
min. Earth dist.	-3532 Nov 12 j 06:16	24° Υ 11'44	28.91990 AU	opposition	-3524 Nov 29 j 13:14	12° 8 03'03	-1°-9'-27
direct	-3531 Jan 29 j 19:19	22° Υ 46'50		min. Earth dist.	-3524 Nov 30 j 01:20	12° 8 02'12	28.98918 AU
				direct	-3523 Feb 16 j 20:21	10° 8 37'48	
conjunction	-3531 May 16 j 00:15	25° Υ 18'41	-1°-34'-52				
minimum elong	-3531 May 16 j 00:15	25° Υ 18'41	1°34'50	conjunction	-3523 Jun 03 j 16:25	13° 8 10'05	-1°-2'-44
max. Earth dist.	-3531 May 15 j 18:27	25° Υ 18'08	30.92290 AU	minimum elong	-3523 Jun 03 j 16:26	13° 8 10'05	1°02'41
retrograde	-3531 Aug 28 j 23:50	27° Υ 49'41		max. Earth dist.	-3523 Jun 03 j 02:02	13° 8 08'45	30.99191 AU
opposition	-3531 Nov 14 j 12:42	26° Υ 25'48	-1°-39'-32		-3523 Jul 28 j 16:30	15° 8	
min. Earth dist.	-3531 Nov 14 j 18:16	26° Υ 25'24	28.92801 AU	retrograde	-3523 Sep 15 j 19:07	15° 8 39'50	
direct	-3530 Feb 01 j 06:32	25° Υ 00'37			-3523 Nov 05 j 01:34	15° 8	
				opposition	-3523 Dec 01 j 23:29	14° 8 16'38	-1°-4'-42
conjunction	-3530 May 18 j 14:16	27° Υ 32'31	-1°-31'-17	min. Earth dist.	-3523 Dec 02 j 11:27	14° 8 15'48	28.99542 AU
minimum elong	-3530 May 18 j 14:17	27° Υ 32'31	1°31'15	direct	-3522 Feb 19 j 08:31	12° 8 51'19	
max. Earth dist.	-3530 May 18 j 07:54	27° Υ 31'55	30.93179 AU		-3522 May 26 j 14:46	15° 8	
	-3530 Aug 17 j 12:05	0° 8					
retrograde	-3530 Aug 31 j 12:43	0° 8 03'22		conjunction	-3522 Jun 06 j 06:00	15° 8 23'36	0°-58'-15
	-3530 Sep 14 j 14:07	30° R Υ		minimum elong	-3522 Jun 06 j 06:01	15° 8 23'37	0°58'10
opposition	-3530 Nov 16 j 22:56	28° Υ 39'35	-1°-35'-38	max. Earth dist.	-3522 Jun 05 j 15:11	15° 8 22'14	30.99808 AU
min. Earth dist.	-3530 Nov 17 j 04:19	28° Υ 39'12	28.93726 AU	retrograde	-3522 Sep 18 j 04:42	17° 8 53'11	
direct	-3529 Feb 03 j 20:25	27° Υ 14'24		opposition	-3522 Dec 04 j 09:52	16° 8 30'01	0°-59'-52
				min. Earth dist.	-3522 Dec 04 j 23:35	16° 8 29'03	29.00165 AU
conjunction	-3529 May 21 j 04:25	29° Υ 46'24	-1°-27'-34	direct	-3521 Feb 21 j 19:50	15° 8 04'39	
minimum elong	-3529 May 21 j 04:25	29° Υ 46'24	1°27'32				
max. Earth dist.	-3529 May 20 j 20:42	29° Υ 45'41	30.94149 AU	conjunction	-3521 Jun 08 j 19:31	17° 8 36'55	0°-53'-42
	-3529 May 27 j 07:04	0° 8		minimum elong	-3521 Jun 08 j 19:31	17° 8 36'55	0°53'37
retrograde	-3529 Sep 03 j 01:04	2° 8 17'07		max. Earth dist.	-3521 Jun 08 j 03:59	17° 8 35'29	31.00458 AU
opposition	-3529 Nov 19 j 09:13	0° 8 53'26	-1°-31'-35	retrograde	-3521 Sep 20 j 16:14	20° 8 06'18	
min. Earth dist.	-3529 Nov 19 j 16:09	0° 8 52'57	28.94725 AU	opposition	-3521 Dec 06 j 20:02	18° 8 43'10	0°-54'-57
	-3529 Dec 23 j 08:27	30° R Υ		min. Earth dist.	-3521 Dec 07 j 09:31	18° 8 42'13	29.00834 AU
direct	-3528 Feb 06 j 08:04	29° Υ 28'16		direct	-3520 Feb 24 j 10:28	17° 8 17'45	
	-3528 Mar 21 j 16:00	0° 8					

Attention, astronomical year style is used: The year -3520 in astronomical counting style is the year 3521 BCE in historical counting style.

conjunction	-3520 Jun 10 j 08:53	19° ♁ 50'01	0°-49'-3	direct	-3512 Mar 13 j 10:33	4° ♁ 59'56		
minimum elong	-3520 Jun 10 j 08:54	19° ♁ 50'01	0°48'58					
max. Earth dist.	-3520 Jun 09 j 16:26	19° ♁ 48'30	31.01170 AU	conjunction	-3512 Jun 28 j 17:04	7° ♁ 32'18	0°-9'-59	
retrograde	-3520 Sep 22 j 03:26	22° ♁ 19'14		minimum elong	-3512 Jun 28 j 17:04	7° ♁ 32'18	0°09'53	
opposition	-3520 Dec 08 j 06:26	20° ♁ 56'08	0°-49'-57	behind sun begin	-3512 Jun 28 j 11:46	7° ♁ 31'50		
min. Earth dist.	-3520 Dec 08 j 20:59	20° ♁ 55'06	29.01610 AU	behind sun end	-3512 Jun 28 j 22:22	7° ♁ 32'46		
direct	-3519 Feb 25 j 22:41	19° ♁ 30'40		max. Earth dist.	-3512 Jun 27 j 19:46	7° ♁ 30'19	31.09448 AU	
				retrograde	-3512 Oct 09 j 16:14	10° ♁ 00'23		
conjunction	-3519 Jun 12 j 22:00	22° ♁ 02'56	0°-44'-21	opposition	-3512 Dec 25 j 17:55	8° ♁ 37'55	0°-7'-59	
minimum elong	-3519 Jun 12 j 22:00	22° ♁ 02'56	0°44'16	min. Earth dist.	-3512 Dec 26 j 12:49	8° ♁ 36'36	29.09882 AU	
max. Earth dist.	-3519 Jun 12 j 05:48	22° ♁ 01'26	31.02010 AU	direct	-3511 Mar 16 j 00:32	7° ♁ 12'31		
retrograde	-3519 Sep 24 j 13:58	24° ♁ 31'59		max. Earth dist.	-3511 Jun 30 j 07:20	9° ♁ 42'47	31.10254 AU	
opposition	-3519 Dec 10 j 16:45	23° ♁ 08'56	0°-44'-53					
min. Earth dist.	-3519 Dec 11 j 07:15	23° ♁ 07'55	29.02505 AU	conjunction	-3511 Jul 01 j 05:38	9° ♁ 44'51	0°-5'00	
direct	-3518 Feb 28 j 12:04	21° ♁ 43'28		minimum elong	-3511 Jul 01 j 05:37	9° ♁ 44'51	0°04'54	
				behind sun begin	-3511 Jun 30 j 23:14	9° ♁ 44'17		
conjunction	-3518 Jun 15 j 11:06	24° ♁ 15'45	0°-39'-34	behind sun end	-3511 Jul 01 j 12:01	9° ♁ 45'25		
minimum elong	-3518 Jun 15 j 11:06	24° ♁ 15'45	0°39'29	retrograde	-3511 Oct 12 j 03:03	12° ♁ 12'48		
max. Earth dist.	-3518 Jun 14 j 17:28	24° ♁ 14'07	31.02980 AU	opposition	-3511 Dec 28 j 04:34	10° ♁ 50'22	0°-2'-38	
retrograde	-3518 Sep 27 j 02:19	26° ♁ 44'38		min. Earth dist.	-3511 Dec 29 j 00:43	10° ♁ 48'58	29.10659 AU	
opposition	-3518 Dec 13 j 02:56	25° ♁ 21'40	0°-39'-45	direct	-3510 Mar 18 j 12:16	9° ♁ 24'56		
min. Earth dist.	-3518 Dec 13 j 17:56	25° ♁ 20'37	29.03544 AU	asc. node	-3510 Jun 27 j 23:08	11° ♁ 44'20		
direct	-3517 Mar 02 j 23:57	23° ♁ 56'12						
max. Earth dist.	-3517 Jun 17 j 07:18	26° ♁ 26'56	31.04075 AU	conjunction	-3510 Jul 03 j 18:14	11° ♁ 57'15	0°00'05	
				minimum elong	-3510 Jul 03 j 18:14	11° ♁ 57'15	0°00'13	
conjunction	-3517 Jun 18 j 00:20	26° ♁ 28'31	0°-34'-44	behind sun begin	-3510 Jul 03 j 11:46	11° ♁ 56'41		
minimum elong	-3517 Jun 18 j 00:21	26° ♁ 28'31	0°34'40	behind sun end	-3510 Jul 04 j 00:43	11° ♁ 57'49		
retrograde	-3517 Sep 29 j 12:24	28° ♁ 57'15		max. Earth dist.	-3510 Jul 02 j 19:57	11° ♁ 55'11	31.11000 AU	
opposition	-3517 Dec 15 j 13:21	27° ♁ 34'23	0°-34'-33	retrograde	-3510 Oct 14 j 13:15	14° ♁ 25'03		
min. Earth dist.	-3517 Dec 16 j 05:15	27° ♁ 33'16	29.04669 AU	opposition	-3510 Dec 30 j 15:00	13° ♁ 02'39	0°02'43	
direct	-3516 Mar 04 j 12:43	26° ♁ 08'57		min. Earth dist.	-3510 Dec 31 j 11:25	13° ♁ 01'14	29.11372 AU	
				direct	-3509 Mar 21 j 01:52	11° ♁ 37'12		
conjunction	-3516 Jun 19 j 13:15	28° ♁ 41'16	0°-29'-51	max. Earth dist.	-3509 Jul 05 j 06:54	14° ♁ 07'17	31.11705 AU	
minimum elong	-3516 Jun 19 j 13:15	28° ♁ 41'16	0°29'45					
max. Earth dist.	-3516 Jun 18 j 18:36	28° ♁ 39'33	31.05236 AU	conjunction	-3509 Jul 06 j 06:38	14° ♁ 09'29	0°05'10	
	-3516 Jul 26 j 14:44	0° ♁		minimum elong	-3509 Jul 06 j 06:37	14° ♁ 09'29	0°05'17	
retrograde	-3516 Sep 30 j 23:32	1° ♁ 09'53		behind sun begin	-3509 Jul 06 j 00:17	14° ♁ 08'55		
	-3516 Dec 09 j 07:36	30° ♁		behind sun end	-3509 Jul 06 j 12:57	14° ♁ 10'02		
opposition	-3516 Dec 16 j 23:42	29° ♁ 47'07	0°-29'-18	retrograde	-3509 Oct 17 j 01:20	16° ♁ 37'08		
min. Earth dist.	-3516 Dec 17 j 15:33	29° ♁ 46'01	29.05845 AU	opposition	-3508 Jan 02 j 01:37	15° ♁ 14'46	0°08'04	
direct	-3515 Mar 07 j 00:19	28° ♁ 21'42		min. Earth dist.	-3508 Jan 02 j 22:25	15° ♁ 13'19	29.12092 AU	
	-3515 May 28 j 07:43	0° ♁		direct	-3508 Mar 22 j 14:27	13° ♁ 49'17		
max. Earth dist.	-3515 Jun 21 j 08:00	0° ♁ 52'22	31.06402 AU					
				conjunction	-3508 Jul 07 j 18:49	16° ♁ 21'32	0°10'08	
conjunction	-3515 Jun 22 j 02:20	0° ♁ 54'04	0°-24'-56	minimum elong	-3508 Jul 07 j 18:49	16° ♁ 21'32	0°10'16	
minimum elong	-3515 Jun 22 j 02:20	0° ♁ 54'04	0°24'50	behind sun begin	-3508 Jul 07 j 13:40	16° ♁ 21'04		
retrograde	-3515 Oct 03 j 08:29	3° ♁ 22'33		behind sun end	-3508 Jul 07 j 23:59	16° ♁ 21'59		
opposition	-3515 Dec 19 j 10:12	1° ♁ 59'53	0°-24'-1	max. Earth dist.	-3508 Jul 06 j 19:59	16° ♁ 19'25	31.12434 AU	
min. Earth dist.	-3515 Dec 20 j 03:38	1° ♁ 58'40	29.06994 AU	retrograde	-3508 Oct 18 j 10:50	18° ♁ 49'03		
direct	-3514 Mar 09 j 11:42	0° ♁ 34'29		opposition	-3507 Jan 03 j 12:18	17° ♁ 26'43	0°13'24	
				min. Earth dist.	-3507 Jan 04 j 09:44	17° ♁ 25'13	29.12846 AU	
conjunction	-3514 Jun 24 j 15:13	3° ♁ 06'51	0°-19'-58	direct	-3507 Mar 25 j 03:58	16° ♁ 01'14		
minimum elong	-3514 Jun 24 j 15:13	3° ♁ 06'52	0°19'51	max. Earth dist.	-3507 Jul 09 j 06:45	18° ♁ 31'12	31.13232 AU	
max. Earth dist.	-3514 Jun 23 j 19:13	3° ♁ 05'00	31.07523 AU					
retrograde	-3514 Oct 05 j 20:09	5° ♁ 35'13		conjunction	-3507 Jul 10 j 06:47	18° ♁ 33'26	0°15'06	
opposition	-3514 Dec 21 j 20:41	4° ♁ 12'38	0°-18'-42	minimum elong	-3507 Jul 10 j 06:47	18° ♁ 33'26	0°15'13	
min. Earth dist.	-3514 Dec 22 j 13:55	4° ♁ 11'26	29.08065 AU	behind sun begin	-3507 Jul 10 j 04:50	18° ♁ 33'16		
direct	-3513 Mar 11 j 23:24	2° ♁ 47'14		behind sun end	-3507 Jul 10 j 08:44	18° ♁ 33'36		
max. Earth dist.	-3513 Jun 26 j 07:47	5° ♁ 17'44	31.08533 AU	retrograde	-3507 Oct 20 j 21:34	21° ♁ 00'51		
				opposition	-3506 Jan 05 j 22:48	19° ♁ 38'33	0°18'43	
conjunction	-3513 Jun 27 j 04:14	5° ♁ 19'37	0°-14'-59	min. Earth dist.	-3506 Jan 06 j 19:39	19° ♁ 37'06	29.13703 AU	
minimum elong	-3513 Jun 27 j 04:14	5° ♁ 19'37	0°14'53	direct	-3506 Mar 27 j 15:48	18° ♁ 13'04		
behind sun begin	-3513 Jun 27 j 01:54	5° ♁ 19'25						
behind sun end	-3513 Jun 27 j 06:33	5° ♁ 19'50		conjunction	-3506 Jul 12 j 18:50	20° ♁ 45'15	0°20'03	
retrograde	-3513 Oct 08 j 05:19	7° ♁ 47'51		minimum elong	-3506 Jul 12 j 18:50	20° ♁ 45'15	0°20'12	
opposition	-3513 Dec 24 j 07:19	6° ♁ 25'20	0°-13'-21	max. Earth dist.	-3506 Jul 11 j 19:42	20° ♁ 43'07	31.14135 AU	
min. Earth dist.	-3513 Dec 25 j 02:22	6° ♁ 24'00	29.09027 AU	retrograde	-3506 Oct 23 j 06:09	23° ♁ 12'34		

Attention, astronomical year style is used: The year -3505 in astronomical counting style is the year 3506 BCE in historical counting style.

opposition	-3505 Jan	08 j 09:35	21°II50'20	0°24'00	opposition	-3497 Jan	26 j 01:15	9°☾25'12	1°04'19
min. Earth dist.	-3505 Jan	09 j 07:23	21°II48'49	29.14660 AU	min. Earth dist.	-3497 Jan	27 j 00:51	9°☾23'34	29.21710 AU
direct	-3505 Mar	30 j 03:27	20°II24'53		direct	-3497 Apr	17 j 04:36	7°☾59'56	
max. Earth dist.	-3505 Jul	14 j 06:37	22°II54'49	31.15147 AU	max. Earth dist.	-3497 Aug	01 j 01:43	10°☾29'25	31.21864 AU
conjunction	-3505 Jul	15 j 06:38	22°II57'03	0°24'59	conjunction	-3497 Aug	02 j 03:15	10°☾31'48	1°02'27
minimum elong	-3505 Jul	15 j 06:38	22°II57'03	0°25'06	minimum elong	-3497 Aug	02 j 03:15	10°☾31'48	1°02'35
retrograde	-3505 Oct	25 j 17:28	25°II24'16		retrograde	-3497 Nov	12 j 03:27	12°☾58'25	
opposition	-3504 Jan	10 j 20:12	24°II02'08	0°29'14	opposition	-3496 Jan	28 j 12:31	11°☾36'35	1°09'00
min. Earth dist.	-3504 Jan	11 j 17:07	24°II00'41	29.15713 AU	min. Earth dist.	-3496 Jan	29 j 13:08	11°☾34'53	29.22145 AU
direct	-3504 Mar	31 j 14:36	22°II36'43		direct	-3496 Apr	18 j 17:41	10°☾11'19	
					max. Earth dist.	-3496 Aug	02 j 11:59	12°☾40'37	31.22288 AU
conjunction	-3504 Jul	16 j 18:31	25°II08'54	0°29'52	conjunction	-3496 Aug	03 j 14:14	12°☾43'04	1°06'47
minimum elong	-3504 Jul	16 j 18:30	25°II08'54	0°30'01	minimum elong	-3496 Aug	03 j 14:13	12°☾43'04	1°06'55
max. Earth dist.	-3504 Jul	15 j 18:50	25°II06'41	31.16228 AU	retrograde	-3496 Nov	13 j 14:16	15°☾09'36	
retrograde	-3504 Oct	27 j 02:10	27°II36'04		opposition	-3495 Jan	29 j 23:38	13°☾47'45	1°13'34
opposition	-3503 Jan	12 j 07:08	26°II14'00	0°34'27	min. Earth dist.	-3495 Jan	30 j 23:09	13°☾46'08	29.22574 AU
min. Earth dist.	-3503 Jan	13 j 05:16	26°II12'28	29.16822 AU	direct	-3495 Apr	21 j 06:13	12°☾22'27	
direct	-3503 Apr	03 j 01:13	24°II48'39		max. Earth dist.	-3495 Aug	04 j 23:27	14°☾51'44	31.22719 AU
max. Earth dist.	-3503 Jul	18 j 06:12	27°II18'35	31.17339 AU					
conjunction	-3503 Jul	19 j 06:07	27°II20'48	0°34'43	conjunction	-3495 Aug	06 j 01:03	14°☾54'08	1°11'01
minimum elong	-3503 Jul	19 j 06:07	27°II20'48	0°34'51	minimum elong	-3495 Aug	06 j 01:03	14°☾54'07	1°11'08
retrograde	-3503 Oct	29 j 12:29	29°II47'55		retrograde	-3495 Nov	15 j 22:22	17°☾20'36	
opposition	-3502 Jan	14 j 17:57	28°II25'56	0°39'36	opposition	-3494 Feb	01 j 10:55	15°☾58'43	1°18'02
min. Earth dist.	-3502 Jan	15 j 15:38	28°II24'26	29.17910 AU	min. Earth dist.	-3494 Feb	02 j 11:14	15°☾57'03	29.23044 AU
direct	-3502 Apr	05 j 14:00	27°II00'38		direct	-3494 Apr	23 j 17:21	14°☾33'25	
					max. Earth dist.	-3494 Aug	07 j 10:30	17°☾02'39	31.23225 AU
conjunction	-3502 Jul	21 j 17:52	29°II32'47	0°39'31	conjunction	-3494 Aug	08 j 11:48	17°☾05'01	1°15'08
minimum elong	-3502 Jul	21 j 17:52	29°II32'47	0°39'39	minimum elong	-3494 Aug	08 j 11:48	17°☾05'01	1°15'16
max. Earth dist.	-3502 Jul	20 j 17:17	29°II30'30	31.18387 AU	retrograde	-3494 Nov	18 j 07:43	19°☾31'25	
	-3502 Aug	02 j 23:10	0°☾		opposition	-3493 Feb	03 j 22:01	18°☾09'34	1°22'23
retrograde	-3502 Oct	31 j 23:16	1°☾59'50		min. Earth dist.	-3493 Feb	04 j 21:15	18°☾07'58	29.23591 AU
opposition	-3501 Jan	17 j 04:51	0°☾37'55	0°44'42	direct	-3493 Apr	26 j 05:41	16°☾44'17	
min. Earth dist.	-3501 Jan	18 j 03:34	0°☾36'21	29.18928 AU					
	-3501 Feb	09 j 20:54	30°☾II		conjunction	-3493 Aug	10 j 22:31	19°☾15'49	1°19'09
direct	-3501 Apr	08 j 00:15	29°II12'39		minimum elong	-3493 Aug	10 j 22:30	19°☾15'49	1°19'16
	-3501 Jun	02 j 12:27	0°☾		max. Earth dist.	-3493 Aug	09 j 21:15	19°☾13'28	31.23815 AU
max. Earth dist.	-3501 Jul	23 j 05:15	1°☾42'31	31.19343 AU	retrograde	-3493 Nov	20 j 18:13	21°☾42'13	
conjunction	-3501 Jul	24 j 05:38	1°☾44'47	0°44'15	opposition	-3492 Feb	06 j 09:23	20°☾20'23	1°26'37
minimum elong	-3501 Jul	24 j 05:37	1°☾44'47	0°44'22	min. Earth dist.	-3492 Feb	07 j 08:47	20°☾18'46	29.24244 AU
retrograde	-3501 Nov	03 j 09:38	4°☾11'46		direct	-3492 Apr	27 j 15:15	18°☾55'09	
opposition	-3500 Jan	19 j 15:58	2°☾49'54	0°49'43	max. Earth dist.	-3492 Aug	11 j 08:52	21°☾24'23	31.24506 AU
min. Earth dist.	-3500 Jan	20 j 14:50	2°☾48'19	29.19816 AU					
direct	-3500 Apr	09 j 13:47	1°☾24'40		conjunction	-3492 Aug	12 j 09:01	21°☾26'38	1°23'03
					minimum elong	-3492 Aug	12 j 09:00	21°☾26'38	1°23'11
conjunction	-3500 Jul	25 j 17:04	3°☾56'45	0°48'55	retrograde	-3492 Nov	22 j 04:08	23°☾53'02	
minimum elong	-3500 Jul	25 j 17:04	3°☾56'45	0°49'03	opposition	-3491 Feb	07 j 20:45	22°☾31'14	1°30'43
max. Earth dist.	-3500 Jul	24 j 15:21	3°☾54'21	31.20160 AU	min. Earth dist.	-3491 Feb	08 j 19:37	22°☾29'40	29.24958 AU
retrograde	-3500 Nov	04 j 22:02	6°☾23'39		direct	-3491 Apr	30 j 04:11	21°☾06'05	
opposition	-3499 Jan	21 j 03:06	5°☾01'49	0°54'40					
min. Earth dist.	-3499 Jan	22 j 02:16	5°☾00'13	29.20578 AU	conjunction	-3491 Aug	14 j 19:29	23°☾37'32	1°26'50
direct	-3499 Apr	12 j 02:27	3°☾36'35		minimum elong	-3491 Aug	14 j 19:28	23°☾37'32	1°26'57
max. Earth dist.	-3499 Jul	27 j 03:38	6°☾06'17	31.20845 AU	max. Earth dist.	-3491 Aug	13 j 18:40	23°☾35'13	31.25236 AU
					retrograde	-3491 Nov	24 j 16:34	26°☾03'57	
conjunction	-3499 Jul	28 j 04:39	6°☾08'36	0°53'31	opposition	-3490 Feb	10 j 08:00	24°☾42'12	1°34'41
minimum elong	-3499 Jul	28 j 04:39	6°☾08'36	0°53'38	min. Earth dist.	-3490 Feb	11 j 06:38	24°☾40'39	29.25703 AU
retrograde	-3499 Nov	07 j 07:26	8°☾35'25		direct	-3490 May	02 j 15:22	23°☾17'06	
opposition	-3498 Jan	23 j 14:11	7°☾13'36	0°59'33	max. Earth dist.	-3490 Aug	16 j 06:30	25°☾46'20	31.25956 AU
min. Earth dist.	-3498 Jan	24 j 14:13	7°☾11'56	29.21197 AU					
direct	-3498 Apr	14 j 16:09	5°☾48'22		conjunction	-3490 Aug	17 j 06:04	25°☾48'32	1°30'29
					minimum elong	-3490 Aug	17 j 06:03	25°☾48'32	1°30'37
conjunction	-3498 Jul	30 j 15:58	8°☾20'18	0°58'02	retrograde	-3490 Nov	27 j 02:22	28°☾14'58	
minimum elong	-3498 Jul	30 j 15:58	8°☾20'18	0°58'10	opposition	-3489 Feb	12 j 19:36	26°☾53'16	1°38'32
max. Earth dist.	-3498 Jul	29 j 13:35	8°☾17'51	31.21405 AU	min. Earth dist.	-3489 Feb	13 j 18:43	26°☾51'41	29.26393 AU
retrograde	-3498 Nov	09 j 18:35	10°☾47'01		direct	-3489 May	05 j 04:06	25°☾28'15	

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Attention, astronomical year style is used: The year -3489 in astronomical counting style is the year 3490 BCE in historical counting style.

conjunction	-3489 Aug 19 j 16:22	27° \mathfrak{D} 59'39	1°34'01	opposition	-3481 Mar 02 j 17:48	14° \mathfrak{Q} 20'58	2°03'39
minimum elong	-3489 Aug 19 j 16:21	27° \mathfrak{D} 59'39	1°34'07	min. Earth dist.	-3481 Mar 03 j 14:16	14° \mathfrak{Q} 19'34	29.28390 AU
max. Earth dist.	-3489 Aug 18 j 15:56	27° \mathfrak{D} 57'21	31.26603 AU	direct	-3481 May 23 j 03:26	12° \mathfrak{Q} 56'08	
	-3489 Oct 21 j 05:20	0° \mathfrak{Q}			-3481 Aug 25 j 02:12	15° \mathfrak{Q}	
retrograde	-3489 Nov 29 j 14:10	0° \mathfrak{Q} 26'06		max. Earth dist.	-3481 Sep 05 j 04:13	15° \mathfrak{Q} 24'51	31.28342 AU
	-3488 Jan 09 j 01:38	30° \mathfrak{R} \mathfrak{D}					
opposition	-3488 Feb 15 j 07:14	29° \mathfrak{D} 04'26	1°42'13	conjunction	-3481 Sep 06 j 00:40	15° \mathfrak{Q} 26'46	1°56'55
min. Earth dist.	-3488 Feb 16 j 05:30	29° \mathfrak{D} 02'55	29.26999 AU	minimum elong	-3481 Sep 06 j 00:40	15° \mathfrak{Q} 26'46	1°57'00
direct	-3488 May 06 j 16:04	27° \mathfrak{D} 39'29		retrograde	-3481 Dec 16 j 21:12	17° \mathfrak{Q} 53'17	
	-3488 Aug 16 j 07:14	0° \mathfrak{Q}		opposition	-3480 Mar 04 j 05:52	16° \mathfrak{Q} 31'24	2°06'02
max. Earth dist.	-3488 Aug 20 j 03:26	0° \mathfrak{Q} 08'38	31.27137 AU	min. Earth dist.	-3480 Mar 05 j 02:03	16° \mathfrak{Q} 30'01	29.28619 AU
				direct	-3480 May 24 j 15:21	15° \mathfrak{Q} 06'36	
conjunction	-3488 Aug 21 j 02:52	0° \mathfrak{Q} 10'50	1°37'24				
minimum elong	-3488 Aug 21 j 02:51	0° \mathfrak{Q} 10'49	1°37'31	conjunction	-3480 Sep 07 j 10:12	17° \mathfrak{Q} 37'09	1°59'03
retrograde	-3488 Dec 01 j 00:00	2° \mathfrak{Q} 37'18		minimum elong	-3480 Sep 07 j 10:12	17° \mathfrak{Q} 37'09	1°59'09
opposition	-3487 Feb 16 j 19:02	1° \mathfrak{Q} 15'39	1°45'46	max. Earth dist.	-3480 Sep 06 j 13:36	17° \mathfrak{Q} 35'13	31.28629 AU
min. Earth dist.	-3487 Feb 17 j 18:11	1° \mathfrak{Q} 14'04	29.27479 AU	retrograde	-3480 Dec 18 j 09:16	20° \mathfrak{Q} 03'43	
	-3487 Apr 14 j 19:14	30° \mathfrak{R} \mathfrak{D}		opposition	-3479 Mar 06 j 17:43	18° \mathfrak{Q} 41'49	2°08'15
direct	-3487 May 09 j 05:10	29° \mathfrak{D} 50'45		min. Earth dist.	-3479 Mar 07 j 12:20	18° \mathfrak{Q} 40'34	29.28957 AU
	-3487 Jun 02 j 04:30	0° \mathfrak{Q}		direct	-3479 May 27 j 02:58	17° \mathfrak{Q} 17'06	
conjunction	-3487 Aug 23 j 13:04	2° \mathfrak{Q} 22'01	1°40'38	conjunction	-3479 Sep 09 j 19:47	19° \mathfrak{Q} 47'34	2°01'02
minimum elong	-3487 Aug 23 j 13:04	2° \mathfrak{Q} 22'01	1°40'45	minimum elong	-3479 Sep 09 j 19:47	19° \mathfrak{Q} 47'34	2°01'07
max. Earth dist.	-3487 Aug 22 j 13:00	2° \mathfrak{Q} 19'46	31.27548 AU	max. Earth dist.	-3479 Sep 09 j 00:48	19° \mathfrak{Q} 45'47	31.28993 AU
retrograde	-3487 Dec 03 j 11:24	4° \mathfrak{Q} 48'30		retrograde	-3479 Dec 20 j 19:47	22° \mathfrak{Q} 14'13	
opposition	-3486 Feb 19 j 06:42	3° \mathfrak{Q} 26'51	1°49'09	opposition	-3478 Mar 09 j 05:50	20° \mathfrak{Q} 52'19	2°10'16
min. Earth dist.	-3486 Feb 20 j 04:47	3° \mathfrak{Q} 25'20	29.27818 AU	min. Earth dist.	-3478 Mar 10 j 00:45	20° \mathfrak{Q} 51'02	29.29343 AU
direct	-3486 May 11 j 18:05	2° \mathfrak{Q} 01'58		direct	-3478 May 29 j 15:47	19° \mathfrak{Q} 27'40	
				max. Earth dist.	-3478 Sep 11 j 10:21	21° \mathfrak{Q} 56'18	31.29389 AU
conjunction	-3486 Aug 25 j 23:23	4° \mathfrak{Q} 33'10	1°43'44				
minimum elong	-3486 Aug 25 j 23:23	4° \mathfrak{Q} 33'10	1°43'51	conjunction	-3478 Sep 12 j 05:14	21° \mathfrak{Q} 58'05	2°02'50
max. Earth dist.	-3486 Aug 24 j 23:41	4° \mathfrak{Q} 30'57	31.27807 AU	minimum elong	-3478 Sep 12 j 05:14	21° \mathfrak{Q} 58'05	2°02'55
retrograde	-3486 Dec 05 j 19:35	6° \mathfrak{Q} 59'39		retrograde	-3478 Dec 23 j 07:19	24° \mathfrak{Q} 24'47	
opposition	-3485 Feb 21 j 18:31	5° \mathfrak{Q} 37'59	1°52'23	opposition	-3477 Mar 11 j 17:52	23° \mathfrak{Q} 02'54	2°12'05
min. Earth dist.	-3485 Feb 22 j 17:32	5° \mathfrak{Q} 36'24	29.28024 AU	min. Earth dist.	-3477 Mar 12 j 11:10	23° \mathfrak{Q} 01'44	29.29730 AU
direct	-3485 May 14 j 05:26	4° \mathfrak{Q} 13'07		direct	-3477 Jun 01 j 04:17	21° \mathfrak{Q} 38'20	
max. Earth dist.	-3485 Aug 27 j 10:11	6° \mathfrak{Q} 42'01	31.27960 AU				
conjunction	-3485 Aug 28 j 09:33	6° \mathfrak{Q} 44'13	1°46'41	conjunction	-3477 Sep 14 j 14:48	24° \mathfrak{Q} 08'41	2°04'27
minimum elong	-3485 Aug 28 j 09:32	6° \mathfrak{Q} 44'13	1°46'47	minimum elong	-3477 Sep 14 j 14:48	24° \mathfrak{Q} 08'41	2°04'32
retrograde	-3485 Dec 08 j 04:42	9° \mathfrak{Q} 10'41		max. Earth dist.	-3477 Sep 13 j 20:41	24° \mathfrak{Q} 06'59	31.29750 AU
opposition	-3484 Feb 24 j 06:20	7° \mathfrak{Q} 48'59	1°55'28	retrograde	-3477 Dec 25 j 16:45	26° \mathfrak{Q} 35'29	
min. Earth dist.	-3484 Feb 25 j 04:18	7° \mathfrak{Q} 47'29	29.28127 AU	opposition	-3476 Mar 13 j 06:16	25° \mathfrak{Q} 13'36	2°13'44
direct	-3484 May 15 j 17:59	6° \mathfrak{Q} 24'07		min. Earth dist.	-3476 Mar 14 j 00:04	25° \mathfrak{Q} 12'24	29.30071 AU
				direct	-3476 Jun 02 j 15:24	23° \mathfrak{Q} 49'08	
conjunction	-3484 Aug 29 j 19:25	8° \mathfrak{Q} 55'06	1°49'29	max. Earth dist.	-3476 Sep 15 j 06:54	26° \mathfrak{Q} 17'45	31.30048 AU
minimum elong	-3484 Aug 29 j 19:24	8° \mathfrak{Q} 55'06	1°49'36				
max. Earth dist.	-3484 Aug 28 j 20:04	8° \mathfrak{Q} 52'54	31.28025 AU	conjunction	-3476 Sep 16 j 00:15	26° \mathfrak{Q} 19'23	2°05'54
retrograde	-3484 Dec 09 j 14:58	11° \mathfrak{Q} 21'35		minimum elong	-3476 Sep 16 j 00:15	26° \mathfrak{Q} 19'23	2°05'59
opposition	-3483 Feb 25 j 18:13	9° \mathfrak{Q} 59'49	1°58'22	retrograde	-3476 Dec 27 j 02:35	28° \mathfrak{Q} 46'16	
min. Earth dist.	-3483 Feb 26 j 16:19	9° \mathfrak{Q} 58'18	29.28189 AU	opposition	-3475 Mar 15 j 18:33	27° \mathfrak{Q} 24'23	2°15'11
direct	-3483 May 18 j 03:39	8° \mathfrak{Q} 34'57		min. Earth dist.	-3475 Mar 16 j 11:10	27° \mathfrak{Q} 23'16	29.30307 AU
max. Earth dist.	-3483 Aug 31 j 07:17	11° \mathfrak{Q} 03'44	31.28078 AU	direct	-3475 Jun 05 j 04:05	25° \mathfrak{Q} 59'59	
conjunction	-3483 Sep 01 j 05:19	11° \mathfrak{Q} 05'48	1°52'07	conjunction	-3475 Sep 18 j 09:46	28° \mathfrak{Q} 30'10	2°07'10
minimum elong	-3483 Sep 01 j 05:18	11° \mathfrak{Q} 05'48	1°52'13	minimum elong	-3475 Sep 18 j 09:46	28° \mathfrak{Q} 30'10	2°07'13
retrograde	-3483 Dec 12 j 00:03	13° \mathfrak{Q} 32'16		max. Earth dist.	-3475 Sep 17 j 16:15	28° \mathfrak{Q} 28'31	31.30215 AU
opposition	-3482 Feb 28 j 05:55	12° \mathfrak{Q} 10'28	2°01'06		-3475 Oct 31 j 02:03	0° \mathfrak{Q}	
min. Earth dist.	-3482 Mar 01 j 03:16	12° \mathfrak{Q} 09'00	29.28250 AU	retrograde	-3475 Dec 29 j 13:32	0° \mathfrak{Q} 57'08	
direct	-3482 May 20 j 17:00	10° \mathfrak{Q} 45'36			-3474 Mar 02 j 18:49	30° \mathfrak{R} \mathfrak{Q}	
conjunction	-3482 Sep 03 j 15:00	13° \mathfrak{Q} 16'21	1°54'36	opposition	-3474 Mar 18 j 06:50	29° \mathfrak{Q} 35'14	2°16'26
minimum elong	-3482 Sep 03 j 15:00	13° \mathfrak{Q} 16'20	1°54'42	min. Earth dist.	-3474 Mar 18 j 23:36	29° \mathfrak{Q} 34'06	29.30418 AU
max. Earth dist.	-3482 Sep 02 j 16:38	13° \mathfrak{Q} 14'14	31.28164 AU	direct	-3474 Jun 07 j 13:58	28° \mathfrak{Q} 10'53	
	-3482 Oct 24 j 13:36	15° \mathfrak{Q}			-3474 Sep 02 j 10:48	0° \mathfrak{Q}	
retrograde	-3482 Dec 14 j 11:53	15° \mathfrak{Q} 42'50		conjunction	-3474 Sep 20 j 19:24	0° \mathfrak{Q} 40'58	2°08'15
	-3481 Feb 05 j 19:49	15° \mathfrak{R} \mathfrak{Q}		minimum elong	-3474 Sep 20 j 19:24	0° \mathfrak{Q} 40'58	2°08'19
				max. Earth dist.	-3474 Sep 20 j 03:06	0° \mathfrak{Q} 39'26	31.30250 AU

Attention, astronomical year style is used: The year -3473 in astronomical counting style is the year 3474 BCE in historical counting style.

retrograde	-3474 Dec 31 j 23:03	3° $\mathring{\text{M}}$ 08'01		direct	-3465 Jun 27 j 23:55	17° $\mathring{\text{M}}$ 47'38	
opposition	-3473 Mar 20 j 19:21	1° $\mathring{\text{M}}$ 46'06	2°17'30				
min. Earth dist.	-3473 Mar 21 j 11:29	1° $\mathring{\text{M}}$ 45'00	29.30372 AU	conjunction	-3465 Oct 10 j 05:43	20° $\mathring{\text{M}}$ 16'51	2°09'41
direct	-3473 Jun 10 j 02:56	0° $\mathring{\text{M}}$ 21'48		minimum elong	-3465 Oct 10 j 05:43	20° $\mathring{\text{M}}$ 16'51	2°09'42
max. Earth dist.	-3473 Sep 22 j 11:50	2° $\mathring{\text{M}}$ 50'11	31.30138 AU	max. Earth dist.	-3465 Oct 09 j 21:13	20° $\mathring{\text{M}}$ 16'03	31.28648 AU
				retrograde	-3464 Jan 21 j 00:17	22° $\mathring{\text{M}}$ 44'50	
conjunction	-3473 Sep 23 j 04:41	2° $\mathring{\text{M}}$ 51'47	2°09'09	opposition	-3464 Apr 09 j 12:49	21° $\mathring{\text{M}}$ 22'29	2°18'08
minimum elong	-3473 Sep 23 j 04:41	2° $\mathring{\text{M}}$ 51'47	2°09'12	min. Earth dist.	-3464 Apr 09 j 21:13	21° $\mathring{\text{M}}$ 21'55	29.28755 AU
retrograde	-3472 Jan 03 j 11:09	5° $\mathring{\text{M}}$ 18'55		direct	-3464 Jun 29 j 12:21	19° $\mathring{\text{M}}$ 58'41	
opposition	-3472 Mar 22 j 07:54	3° $\mathring{\text{M}}$ 56'55	2°18'22				
min. Earth dist.	-3472 Mar 22 j 23:18	3° $\mathring{\text{M}}$ 55'53	29.30203 AU	conjunction	-3464 Oct 11 j 14:47	22° $\mathring{\text{M}}$ 27'49	2°08'54
direct	-3472 Jun 11 j 13:00	2° $\mathring{\text{M}}$ 32'39		minimum elong	-3464 Oct 11 j 14:47	22° $\mathring{\text{M}}$ 27'49	2°08'56
				max. Earth dist.	-3464 Oct 11 j 05:59	22° $\mathring{\text{M}}$ 26'59	31.28542 AU
conjunction	-3472 Sep 24 j 14:09	5° $\mathring{\text{M}}$ 02'32	2°09'52	retrograde	-3463 Jan 22 j 12:21	24° $\mathring{\text{M}}$ 55'57	
minimum elong	-3472 Sep 24 j 14:09	5° $\mathring{\text{M}}$ 02'32	2°09'56	opposition	-3463 Apr 12 j 01:33	23° $\mathring{\text{M}}$ 33'34	2°17'12
max. Earth dist.	-3472 Sep 23 j 22:58	5° $\mathring{\text{M}}$ 01'06	31.29909 AU	min. Earth dist.	-3463 Apr 12 j 09:06	23° $\mathring{\text{M}}$ 33'04	29.28612 AU
retrograde	-3471 Jan 04 j 20:44	7° $\mathring{\text{M}}$ 29'44		direct	-3463 Jul 01 j 21:36	22° $\mathring{\text{M}}$ 09'51	
opposition	-3471 Mar 24 j 20:23	6° $\mathring{\text{M}}$ 07'40	2°19'02				
min. Earth dist.	-3471 Mar 25 j 11:48	6° $\mathring{\text{M}}$ 06'38	29.29927 AU	conjunction	-3463 Oct 14 j 00:03	24° $\mathring{\text{M}}$ 38'54	2°07'56
direct	-3471 Jun 14 j 00:36	4° $\mathring{\text{M}}$ 43'26		minimum elong	-3463 Oct 14 j 00:03	24° $\mathring{\text{M}}$ 38'54	2°07'56
				max. Earth dist.	-3463 Oct 13 j 16:55	24° $\mathring{\text{M}}$ 38'14	31.28337 AU
conjunction	-3471 Sep 26 j 23:19	7° $\mathring{\text{M}}$ 13'11	2°10'24	retrograde	-3462 Jan 24 j 22:33	27° $\mathring{\text{M}}$ 07'10	
minimum elong	-3471 Sep 26 j 23:18	7° $\mathring{\text{M}}$ 13'11	2°10'27	opposition	-3462 Apr 14 j 14:33	25° $\mathring{\text{M}}$ 44'45	2°16'05
max. Earth dist.	-3471 Sep 26 j 07:56	7° $\mathring{\text{M}}$ 11'44	31.29611 AU	min. Earth dist.	-3462 Apr 14 j 22:02	25° $\mathring{\text{M}}$ 44'15	29.28335 AU
retrograde	-3470 Jan 07 j 09:02	9° $\mathring{\text{M}}$ 40'28		direct	-3462 Jul 04 j 08:55	24° $\mathring{\text{M}}$ 21'06	
opposition	-3470 Mar 27 j 08:49	8° $\mathring{\text{M}}$ 18'20	2°19'31				
min. Earth dist.	-3470 Mar 27 j 22:39	8° $\mathring{\text{M}}$ 17'24	29.29615 AU	conjunction	-3462 Oct 16 j 09:07	26° $\mathring{\text{M}}$ 50'03	2°06'47
direct	-3470 Jun 16 j 12:27	6° $\mathring{\text{M}}$ 54'06		minimum elong	-3462 Oct 16 j 09:08	26° $\mathring{\text{M}}$ 50'03	2°06'48
				max. Earth dist.	-3462 Oct 16 j 01:47	26° $\mathring{\text{M}}$ 49'21	31.27998 AU
conjunction	-3470 Sep 29 j 08:28	9° $\mathring{\text{M}}$ 23'45	2°10'45	retrograde	-3461 Jan 27 j 11:26	29° $\mathring{\text{M}}$ 18'27	
minimum elong	-3470 Sep 29 j 08:28	9° $\mathring{\text{M}}$ 23'45	2°10'48	opposition	-3461 Apr 17 j 03:31	27° $\mathring{\text{M}}$ 55'58	2°14'45
max. Earth dist.	-3470 Sep 28 j 18:46	9° $\mathring{\text{M}}$ 22'27	31.29290 AU	min. Earth dist.	-3461 Apr 17 j 09:34	27° $\mathring{\text{M}}$ 55'34	29.27919 AU
retrograde	-3469 Jan 09 j 19:53	11° $\mathring{\text{M}}$ 51'06		direct	-3461 Jul 06 j 20:17	26° $\mathring{\text{M}}$ 32'21	
opposition	-3469 Mar 29 j 21:28	10° $\mathring{\text{M}}$ 28'54	2°19'47				
min. Earth dist.	-3469 Mar 30 j 11:17	10° $\mathring{\text{M}}$ 27'58	29.29315 AU	conjunction	-3461 Oct 18 j 18:25	29° $\mathring{\text{M}}$ 01'12	2°05'27
direct	-3469 Jun 19 j 01:14	9° $\mathring{\text{M}}$ 04'43		minimum elong	-3461 Oct 18 j 18:26	29° $\mathring{\text{M}}$ 01'12	2°05'27
				max. Earth dist.	-3461 Oct 18 j 12:17	29° $\mathring{\text{M}}$ 00'38	31.27502 AU
conjunction	-3469 Oct 01 j 17:32	11° $\mathring{\text{M}}$ 34'15	2°10'55		-3461 Nov 14 j 08:42	0° $\mathring{\text{M}}$	
minimum elong	-3469 Oct 01 j 17:32	11° $\mathring{\text{M}}$ 34'15	2°10'57	retrograde	-3460 Jan 29 j 23:03	1° $\mathring{\text{M}}$ 29'44	
max. Earth dist.	-3469 Oct 01 j 04:26	11° $\mathring{\text{M}}$ 33'01	31.29031 AU	opposition	-3460 Apr 18 j 16:38	0° $\mathring{\text{M}}$ 07'10	2°13'14
retrograde	-3468 Jan 12 j 07:38	14° $\mathring{\text{M}}$ 01'42		min. Earth dist.	-3460 Apr 18 j 22:58	0° $\mathring{\text{M}}$ 06'44	29.27348 AU
opposition	-3468 Mar 31 j 10:01	12° $\mathring{\text{M}}$ 39'27	2°19'52		-3460 Apr 23 j 03:06	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
min. Earth dist.	-3468 Mar 31 j 21:38	12° $\mathring{\text{M}}$ 38'40	29.29094 AU	direct	-3460 Jul 08 j 08:05	28° $\mathring{\text{M}}$ 43'34	
direct	-3468 Jun 20 j 13:31	11° $\mathring{\text{M}}$ 15'18			-3460 Sep 16 j 20:57	0° $\mathring{\text{M}}$	
conjunction	-3468 Oct 03 j 02:32	13° $\mathring{\text{M}}$ 44'45	2°10'53	conjunction	-3460 Oct 20 j 03:31	1° $\mathring{\text{M}}$ 12'18	2°03'56
minimum elong	-3468 Oct 03 j 02:33	13° $\mathring{\text{M}}$ 44'45	2°10'56	minimum elong	-3460 Oct 20 j 03:32	1° $\mathring{\text{M}}$ 12'18	2°03'57
max. Earth dist.	-3468 Oct 02 j 14:31	13° $\mathring{\text{M}}$ 43'37	31.28848 AU	max. Earth dist.	-3460 Oct 19 j 21:45	1° $\mathring{\text{M}}$ 11'46	31.26873 AU
retrograde	-3467 Jan 13 j 17:17	16° $\mathring{\text{M}}$ 12'20		retrograde	-3459 Jan 31 j 11:03	3° $\mathring{\text{M}}$ 40'56	
opposition	-3467 Apr 02 j 22:41	14° $\mathring{\text{M}}$ 50'02	2°19'44	opposition	-3459 Apr 21 j 05:33	2° $\mathring{\text{M}}$ 18'16	2°11'32
min. Earth dist.	-3467 Apr 03 j 10:15	14° $\mathring{\text{M}}$ 49'15	29.28958 AU	min. Earth dist.	-3459 Apr 21 j 10:06	2° $\mathring{\text{M}}$ 17'58	29.26644 AU
direct	-3467 Jun 23 j 00:52	13° $\mathring{\text{M}}$ 25'58		direct	-3459 Jul 10 j 20:11	0° $\mathring{\text{M}}$ 54'40	
conjunction	-3467 Oct 05 j 11:38	15° $\mathring{\text{M}}$ 55'20	2°10'41	conjunction	-3459 Oct 22 j 12:39	3° $\mathring{\text{M}}$ 23'18	2°02'15
minimum elong	-3467 Oct 05 j 11:38	15° $\mathring{\text{M}}$ 55'20	2°10'42	minimum elong	-3459 Oct 22 j 12:39	3° $\mathring{\text{M}}$ 23'18	2°02'14
max. Earth dist.	-3467 Oct 05 j 00:59	15° $\mathring{\text{M}}$ 54'19	31.28755 AU	max. Earth dist.	-3459 Oct 22 j 07:28	3° $\mathring{\text{M}}$ 22'48	31.26118 AU
retrograde	-3466 Jan 16 j 03:22	18° $\mathring{\text{M}}$ 23'01		retrograde	-3458 Feb 02 j 21:44	5° $\mathring{\text{M}}$ 52'01	
opposition	-3466 Apr 05 j 11:08	17° $\mathring{\text{M}}$ 00'42	2°19'24	opposition	-3458 Apr 23 j 18:29	4° $\mathring{\text{M}}$ 29'15	2°09'38
min. Earth dist.	-3466 Apr 05 j 20:59	17° $\mathring{\text{M}}$ 00'03	29.28879 AU	min. Earth dist.	-3458 Apr 23 j 23:15	4° $\mathring{\text{M}}$ 28'55	29.25857 AU
direct	-3466 Jun 25 j 13:50	15° $\mathring{\text{M}}$ 36'44		direct	-3458 Jul 13 j 08:11	3° $\mathring{\text{M}}$ 05'40	
conjunction	-3466 Oct 07 j 20:40	18° $\mathring{\text{M}}$ 06'01	2°10'16	conjunction	-3458 Oct 24 j 21:43	5° $\mathring{\text{M}}$ 34'09	2°00'24
minimum elong	-3466 Oct 07 j 20:40	18° $\mathring{\text{M}}$ 06'01	2°10'19	minimum elong	-3458 Oct 24 j 21:43	5° $\mathring{\text{M}}$ 34'09	2°00'24
max. Earth dist.	-3466 Oct 07 j 10:20	18° $\mathring{\text{M}}$ 05'03	31.28698 AU	max. Earth dist.	-3458 Oct 24 j 18:04	5° $\mathring{\text{M}}$ 33'48	31.25325 AU
retrograde	-3465 Jan 18 j 14:56	20° $\mathring{\text{M}}$ 33'51		retrograde	-3457 Feb 05 j 08:33	8° $\mathring{\text{M}}$ 02'58	
opposition	-3465 Apr 07 j 23:57	19° $\mathring{\text{M}}$ 11'32	2°18'52	opposition	-3457 Apr 26 j 07:27	6° $\mathring{\text{M}}$ 40'06	2°07'34
min. Earth dist.	-3465 Apr 08 j 09:24	19° $\mathring{\text{M}}$ 10'53	29.28835 AU	min. Earth dist.	-3457 Apr 26 j 10:22	6° $\mathring{\text{M}}$ 39'54	29.25053 AU

Attention, astronomical year style is used: The year -3457 in astronomical counting style is the year 3458 BCE in historical counting style.

direct	-3457 Jul 15 j 21:47	5° <u>♂</u> 16'31		minimum elong	-3449 Nov 13 j 07:40	25° <u>♂</u> 13'57	1°36'10
				max. Earth dist.	-3449 Nov 13 j 12:54	25° <u>♂</u> 14'26	31.19869 AU
conjunction	-3457 Oct 27 j 06:33	7° <u>♂</u> 44'53	1°58'22	retrograde	-3448 Feb 25 j 18:57	27° <u>♂</u> 44'15	
minimum elong	-3457 Oct 27 j 06:34	7° <u>♂</u> 44'54	1°58'21	opposition	-3448 May 16 j 05:02	26° <u>♂</u> 20'53	1°40'58
max. Earth dist.	-3457 Oct 27 j 03:17	7° <u>♂</u> 44'35	31.24544 AU	min. Earth dist.	-3448 May 15 j 23:13	26° <u>♂</u> 21'17	29.19535 AU
retrograde	-3456 Feb 07 j 20:04	10° <u>♂</u> 13'50		direct	-3448 Aug 04 j 02:31	24° <u>♂</u> 57'51	
opposition	-3456 Apr 27 j 20:31	8° <u>♂</u> 50'52	2°05'19				
min. Earth dist.	-3456 Apr 27 j 22:48	8° <u>♂</u> 50'42	29.24310 AU	conjunction	-3448 Nov 14 j 17:05	27° <u>♂</u> 25'41	1°32'46
direct	-3456 Jul 17 j 08:27	7° <u>♂</u> 27'18		minimum elong	-3448 Nov 14 j 17:05	27° <u>♂</u> 25'41	1°32'44
				max. Earth dist.	-3448 Nov 14 j 22:04	27° <u>♂</u> 26'09	31.19007 AU
conjunction	-3456 Oct 28 j 15:40	9° <u>♂</u> 55'35	1°56'10	retrograde	-3447 Feb 27 j 07:04	29° <u>♂</u> 56'08	
minimum elong	-3456 Oct 28 j 15:41	9° <u>♂</u> 55'35	1°56'10	opposition	-3447 May 18 j 18:07	28° <u>♂</u> 32'41	1°37'13
max. Earth dist.	-3456 Oct 28 j 14:30	9° <u>♂</u> 55'28	31.23840 AU	min. Earth dist.	-3447 May 18 j 12:15	28° <u>♂</u> 33'04	29.18613 AU
retrograde	-3455 Feb 09 j 05:17	12° <u>♂</u> 24'40		direct	-3447 Aug 06 j 13:13	27° <u>♂</u> 09'38	
opposition	-3455 Apr 30 j 09:18	11° <u>♂</u> 01'37	2°02'52				
min. Earth dist.	-3455 Apr 30 j 10:10	11° <u>♂</u> 01'33	29.23641 AU	conjunction	-3447 Nov 17 j 02:37	29° <u>♂</u> 37'23	1°29'12
direct	-3455 Jul 19 j 20:52	9° <u>♂</u> 38'06		minimum elong	-3447 Nov 17 j 02:37	29° <u>♂</u> 37'23	1°29'08
				max. Earth dist.	-3447 Nov 17 j 09:17	29° <u>♂</u> 38'01	31.18036 AU
conjunction	-3455 Oct 31 j 00:36	12° <u>♂</u> 06'18	1°53'48		-3447 Nov 27 j 01:45	0° <u>♂</u>	
minimum elong	-3455 Oct 31 j 00:36	12° <u>♂</u> 06'18	1°53'47	retrograde	-3446 Mar 01 j 16:43	2° <u>♂</u> 07'58	
max. Earth dist.	-3455 Oct 30 j 23:29	12° <u>♂</u> 06'12	31.23228 AU	opposition	-3446 May 21 j 07:15	0° <u>♂</u> 44'25	1°33'19
retrograde	-3454 Feb 11 j 17:20	14° <u>♂</u> 35'33		min. Earth dist.	-3446 May 21 j 00:20	0° <u>♂</u> 44'53	29.17587 AU
opposition	-3454 May 02 j 22:16	13° <u>♂</u> 12'27	2°00'15		-3446 Jun 19 j 03:30	30° <u>♂</u>	
min. Earth dist.	-3454 May 02 j 21:46	13° <u>♂</u> 12'29	29.23070 AU	direct	-3446 Aug 09 j 02:22	29° <u>♂</u> 21'23	
direct	-3454 Jul 22 j 06:22	11° <u>♂</u> 49'00			-3446 Sep 26 j 13:42	0° <u>♂</u>	
conjunction	-3454 Nov 02 j 09:36	14° <u>♂</u> 17'08	1°51'16	conjunction	-3446 Nov 19 j 11:48	1° <u>♂</u> 49'01	1°25'29
minimum elong	-3454 Nov 02 j 09:37	14° <u>♂</u> 17'08	1°51'15	minimum elong	-3446 Nov 19 j 11:49	1° <u>♂</u> 49'01	1°25'26
max. Earth dist.	-3454 Nov 02 j 10:39	14° <u>♂</u> 17'14	31.22692 AU	max. Earth dist.	-3446 Nov 19 j 18:21	1° <u>♂</u> 49'38	31.16999 AU
retrograde	-3453 Feb 14 j 03:43	16° <u>♂</u> 46'33		retrograde	-3445 Mar 04 j 04:47	4° <u>♂</u> 19'43	
opposition	-3453 May 05 j 11:23	15° <u>♂</u> 23'25	1°57'27	opposition	-3445 May 23 j 20:24	2° <u>♂</u> 56'03	1°29'18
min. Earth dist.	-3453 May 05 j 10:17	15° <u>♂</u> 23'29	29.22554 AU	min. Earth dist.	-3445 May 23 j 12:23	2° <u>♂</u> 56'36	29.16544 AU
direct	-3453 Jul 24 j 17:26	14° <u>♂</u> 00'03		direct	-3445 Aug 11 j 13:07	1° <u>♂</u> 33'00	
conjunction	-3453 Nov 04 j 18:37	16° <u>♂</u> 28'07	1°48'34	conjunction	-3445 Nov 21 j 21:16	4° <u>♂</u> 00'33	1°21'40
minimum elong	-3453 Nov 04 j 18:37	16° <u>♂</u> 28'08	1°48'32	minimum elong	-3445 Nov 21 j 21:16	4° <u>♂</u> 00'33	1°21'35
max. Earth dist.	-3453 Nov 04 j 20:00	16° <u>♂</u> 28'15	31.22213 AU	max. Earth dist.	-3445 Nov 22 j 05:48	4° <u>♂</u> 01'22	31.15965 AU
retrograde	-3452 Feb 16 j 16:57	18° <u>♂</u> 57'44		retrograde	-3444 Mar 05 j 15:05	6° <u>♂</u> 31'23	
opposition	-3452 May 07 j 00:22	17° <u>♂</u> 34'34	1°54'29	opposition	-3444 May 25 j 09:26	5° <u>♂</u> 07'36	1°25'08
min. Earth dist.	-3452 May 06 j 21:29	17° <u>♂</u> 34'46	29.22080 AU	min. Earth dist.	-3444 May 25 j 00:52	5° <u>♂</u> 08'11	29.15533 AU
direct	-3452 Jul 26 j 03:43	16° <u>♂</u> 11'17		direct	-3444 Aug 13 j 00:55	3° <u>♂</u> 44'33	
conjunction	-3452 Nov 06 j 03:45	18° <u>♂</u> 39'19	1°45'43	conjunction	-3444 Nov 23 j 06:37	6° <u>♂</u> 12'01	1°17'43
minimum elong	-3452 Nov 06 j 03:46	18° <u>♂</u> 39'19	1°45'41	minimum elong	-3444 Nov 23 j 06:38	6° <u>♂</u> 12'01	1°17'39
max. Earth dist.	-3452 Nov 06 j 06:33	18° <u>♂</u> 39'35	31.21730 AU	max. Earth dist.	-3444 Nov 23 j 15:35	6° <u>♂</u> 12'52	31.15004 AU
retrograde	-3451 Feb 18 j 05:09	21° <u>♂</u> 09'07		retrograde	-3443 Mar 08 j 03:13	8° <u>♂</u> 42'59	
opposition	-3451 May 09 j 13:32	19° <u>♂</u> 45'55	1°51'21	opposition	-3443 May 27 j 22:21	7° <u>♂</u> 19'06	1°20'51
min. Earth dist.	-3451 May 09 j 10:46	19° <u>♂</u> 46'06	29.21576 AU	min. Earth dist.	-3443 May 27 j 11:55	7° <u>♂</u> 19'49	29.14615 AU
direct	-3451 Jul 28 j 14:15	18° <u>♂</u> 22'43		direct	-3443 Aug 15 j 11:11	5° <u>♂</u> 56'04	
conjunction	-3451 Nov 08 j 12:57	20° <u>♂</u> 50'42	1°42'42	conjunction	-3443 Nov 25 j 16:01	8° <u>♂</u> 23'28	1°13'39
minimum elong	-3451 Nov 08 j 12:57	20° <u>♂</u> 50'42	1°42'38	minimum elong	-3443 Nov 25 j 16:01	8° <u>♂</u> 23'28	1°13'34
max. Earth dist.	-3451 Nov 08 j 16:25	20° <u>♂</u> 51'02	31.21209 AU	max. Earth dist.	-3443 Nov 26 j 02:26	8° <u>♂</u> 24'27	31.14130 AU
retrograde	-3450 Feb 20 j 17:57	23° <u>♂</u> 20'41		retrograde	-3442 Mar 10 j 14:33	10° <u>♂</u> 54'35	
opposition	-3450 May 12 j 02:31	21° <u>♂</u> 57'27	1°48'02	opposition	-3442 May 30 j 11:23	9° <u>♂</u> 30'37	1°16'27
min. Earth dist.	-3450 May 11 j 21:54	21° <u>♂</u> 57'45	29.21006 AU	min. Earth dist.	-3442 May 30 j 00:46	9° <u>♂</u> 31'21	29.13796 AU
direct	-3450 Jul 31 j 01:17	20° <u>♂</u> 34'18		direct	-3442 Aug 17 j 21:05	8° <u>♂</u> 07'37	
conjunction	-3450 Nov 10 j 22:15	23° <u>♂</u> 02'16	1°39'32	conjunction	-3442 Nov 28 j 01:33	10° <u>♂</u> 34'58	1°09'29
minimum elong	-3450 Nov 10 j 22:16	23° <u>♂</u> 02'16	1°39'29	minimum elong	-3442 Nov 28 j 01:33	10° <u>♂</u> 34'58	1°09'25
max. Earth dist.	-3450 Nov 11 j 02:10	23° <u>♂</u> 02'38	31.20592 AU	max. Earth dist.	-3442 Nov 28 j 13:03	10° <u>♂</u> 36'03	31.13382 AU
retrograde	-3449 Feb 23 j 06:17	25° <u>♂</u> 32'25		retrograde	-3441 Mar 13 j 03:32	13° <u>♂</u> 06'14	
opposition	-3449 May 14 j 15:52	24° <u>♂</u> 09'07	1°44'35	min. Earth dist.	-3441 Jun 01 j 11:31	11° <u>♂</u> 43'06	29.13088 AU
min. Earth dist.	-3449 May 14 j 11:31	24° <u>♂</u> 09'25	29.20337 AU	opposition	-3441 Jun 02 j 00:20	11° <u>♂</u> 42'14	1°11'56
direct	-3449 Aug 02 j 12:58	22° <u>♂</u> 46'03		direct	-3441 Aug 20 j 07:43	10° <u>♂</u> 19'15	
conjunction	-3449 Nov 13 j 07:39	25° <u>♂</u> 13'56	1°36'13	conjunction	-3441 Nov 30 j 11:01	12° <u>♂</u> 46'34	1°05'12

Attention, astronomical year style is used: The year -3441 in astronomical counting style is the year 3442 BCE in historical counting style.

minimum elong	-3441 Nov 30 j 11:01	12°M46'34	1°05'07	min. Earth dist.	-3433 Jun 19 j 16:16	29°M21'44	29.06674 AU
max. Earth dist.	-3441 Nov 30 j 23:10	12°M47'43	31.12716 AU	direct	-3433 Sep 07 j 01:26	27°M57'52	
	-3440 Feb 10 j 08:45	15°M			-3433 Dec 06 j 18:28	0°Z	
retrograde	-3440 Mar 14 j 16:37	15°M18'01					
	-3440 Apr 17 j 21:36	15°RM		conjunction	-3433 Dec 17 j 19:34	0°Z25'02	0°27'57
opposition	-3440 Jun 03 j 13:28	13°M53'58	1°07'18	minimum elong	-3433 Dec 17 j 19:34	0°Z25'02	0°27'50
min. Earth dist.	-3440 Jun 03 j 00:43	13°M54'50	29.12455 AU	max. Earth dist.	-3433 Dec 18 j 13:16	0°Z26'42	31.06099 AU
direct	-3440 Aug 21 j 18:35	12°M31'03		retrograde	-3432 Apr 01 j 20:22	2°Z57'42	
				opposition	-3432 Jun 21 j 21:45	1°Z33'11	0°27'10
conjunction	-3440 Dec 01 j 20:48	14°M58'21	1°00'49	min. Earth dist.	-3432 Jun 21 j 03:22	1°Z34'26	29.05565 AU
minimum elong	-3440 Dec 01 j 20:49	14°M58'21	1°00'44	direct	-3432 Sep 08 j 12:23	0°Z10'25	
max. Earth dist.	-3440 Dec 02 j 10:37	14°M59'40	31.12112 AU				
	-3440 Dec 02 j 14:12	15°M		conjunction	-3432 Dec 19 j 05:54	2°Z37'34	0°23'02
retrograde	-3439 Mar 17 j 05:54	17°M29'57		minimum elong	-3432 Dec 19 j 05:54	2°Z37'34	0°22'55
min. Earth dist.	-3439 Jun 05 j 11:58	16°M06'51	29.11847 AU	max. Earth dist.	-3432 Dec 19 j 23:51	2°Z39'15	31.05003 AU
opposition	-3439 Jun 06 j 02:17	16°M05'53	1°02'34	retrograde	-3431 Apr 04 j 09:18	5°Z10'21	
	-3439 Jul 22 j 16:41	15°RM		opposition	-3431 Jun 24 j 10:33	3°Z45'45	0°21'54
direct	-3439 Aug 24 j 06:57	14°M43'01		min. Earth dist.	-3431 Jun 23 j 16:27	3°Z46'59	29.04512 AU
	-3439 Sep 24 j 23:40	15°M		direct	-3431 Sep 10 j 23:11	2°Z22'58	
conjunction	-3439 Dec 04 j 06:33	17°M10'19	0°56'21	conjunction	-3431 Dec 21 j 16:22	4°Z50'07	0°18'05
minimum elong	-3439 Dec 04 j 06:33	17°M10'19	0°56'15	minimum elong	-3431 Dec 21 j 16:22	4°Z50'07	0°17'58
max. Earth dist.	-3439 Dec 04 j 20:13	17°M11'37	31.11506 AU	max. Earth dist.	-3431 Dec 22 j 12:00	4°Z51'58	31.03998 AU
retrograde	-3438 Mar 19 j 19:04	19°M42'07		retrograde	-3430 Apr 06 j 22:52	7°Z23'02	
opposition	-3438 Jun 08 j 15:27	18°M18'00	0°57'44	opposition	-3430 Jun 26 j 23:19	5°Z58'22	0°16'35
min. Earth dist.	-3438 Jun 08 j 01:03	18°M18'58	29.11231 AU	min. Earth dist.	-3430 Jun 26 j 03:31	5°Z59'43	29.03553 AU
direct	-3438 Aug 26 j 17:03	16°M55'12		direct	-3430 Sep 13 j 11:12	4°Z35'35	
conjunction	-3438 Dec 06 j 16:28	19°M22'29	0°51'47	conjunction	-3430 Dec 24 j 02:40	7°Z02'44	0°13'07
minimum elong	-3438 Dec 06 j 16:29	19°M22'29	0°51'42	minimum elong	-3430 Dec 24 j 02:39	7°Z02'44	0°13'00
max. Earth dist.	-3438 Dec 07 j 07:53	19°M23'57	31.10862 AU	behind sun begin	-3430 Dec 23 j 22:42	7°Z02'22	
retrograde	-3437 Mar 22 j 06:36	21°M54'27		behind sun end	-3430 Dec 24 j 06:37	7°Z03'05	
opposition	-3437 Jun 11 j 04:36	20°M30'18	0°52'49	max. Earth dist.	-3430 Dec 24 j 22:12	7°Z04'34	31.03096 AU
min. Earth dist.	-3437 Jun 10 j 13:19	20°M31'21	29.10540 AU	retrograde	-3429 Apr 09 j 12:10	9°Z35'47	
direct	-3437 Aug 29 j 05:58	19°M07'33		opposition	-3429 Jun 29 j 12:14	8°Z11'04	0°11'14
				min. Earth dist.	-3429 Jun 28 j 16:17	8°Z12'26	29.02713 AU
conjunction	-3437 Dec 09 j 02:33	21°M34'50	0°47'08	direct	-3429 Sep 15 j 21:01	6°Z48'17	
minimum elong	-3437 Dec 09 j 02:33	21°M34'50	0°47'02				
max. Earth dist.	-3437 Dec 09 j 17:25	21°M36'15	31.10130 AU	conjunction	-3429 Dec 26 j 13:21	9°Z15'27	0°08'07
retrograde	-3436 Mar 23 j 20:20	24°M06'58		minimum elong	-3429 Dec 26 j 13:21	9°Z15'27	0°08'00
opposition	-3436 Jun 12 j 17:38	22°M42'46	0°47'49	behind sun begin	-3429 Dec 26 j 07:35	9°Z14'56	
min. Earth dist.	-3436 Jun 12 j 01:48	22°M43'51	29.09754 AU	behind sun end	-3429 Dec 26 j 19:07	9°Z15'59	
direct	-3436 Aug 30 j 16:42	21°M20'03		max. Earth dist.	-3429 Dec 27 j 10:43	9°Z17'28	31.02303 AU
				retrograde	-3428 Apr 11 j 00:53	11°Z48'39	
conjunction	-3436 Dec 10 j 12:51	23°M47'20	0°42'25	min. Earth dist.	-3428 Jun 30 j 03:54	10°Z25'20	29.01961 AU
minimum elong	-3436 Dec 10 j 12:51	23°M47'20	0°42'20	opposition	-3428 Jul 01 j 00:49	10°Z23'54	0°05'53
max. Earth dist.	-3436 Dec 11 j 05:00	23°M48'51	31.09272 AU	direct	-3428 Sep 17 j 10:00	9°Z01'09	
retrograde	-3435 Mar 26 j 07:25	26°M19'37					
opposition	-3435 Jun 15 j 06:46	24°M55'21	0°42'44	conjunction	-3428 Dec 27 j 23:58	11°Z28'21	0°03'07
min. Earth dist.	-3435 Jun 14 j 14:58	24°M56'26	29.08822 AU	minimum elong	-3428 Dec 27 j 23:58	11°Z28'21	0°03'00
direct	-3435 Sep 02 j 04:39	23°M32'39		behind sun begin	-3428 Dec 27 j 17:34	11°Z27'46	
				behind sun end	-3428 Dec 28 j 06:23	11°Z28'56	
conjunction	-3435 Dec 12 j 23:00	25°M59'53	0°37'39	max. Earth dist.	-3428 Dec 28 j 20:57	11°Z30'20	31.01597 AU
minimum elong	-3435 Dec 12 j 23:00	25°M59'53	0°37'32	retrograde	-3427 Apr 13 j 15:47	14°Z01'41	
max. Earth dist.	-3435 Dec 13 j 15:03	26°M01'24	31.08291 AU	opposition	-3427 Jul 03 j 13:34	12°Z36'54	0°00'30
retrograde	-3434 Mar 28 j 19:54	28°M32'19		min. Earth dist.	-3427 Jul 02 j 15:59	12°Z38'23	29.01288 AU
opposition	-3434 Jun 17 j 19:48	27°M07'59	0°37'36	desc. node	-3427 Aug 06 j 07:13	11°Z45'23	
min. Earth dist.	-3434 Jun 17 j 02:48	27°M09'08	29.07782 AU	direct	-3427 Sep 19 j 21:05	11°Z14'11	
direct	-3434 Sep 04 j 15:21	25°M45'16					
				conjunction	-3427 Dec 30 j 10:45	13°Z41'25	0°-2'-2
conjunction	-3434 Dec 15 j 09:17	28°M12'28	0°32'49	minimum elong	-3427 Dec 30 j 10:45	13°Z41'25	0°02'11
minimum elong	-3434 Dec 15 j 09:17	28°M12'28	0°32'43	behind sun begin	-3427 Dec 30 j 04:19	13°Z40'50	
max. Earth dist.	-3434 Dec 16 j 02:10	28°M14'04	31.07206 AU	behind sun end	-3427 Dec 30 j 17:12	13°Z42'00	
	-3433 Feb 05 j 20:59	0°Z		max. Earth dist.	-3427 Dec 31 j 09:13	13°Z43'32	31.00931 AU
retrograde	-3433 Mar 31 j 07:19	0°Z45'01		retrograde	-3426 Apr 16 j 03:04	16°Z14'54	
	-3433 May 26 j 07:07	30°RM		min. Earth dist.	-3426 Jul 05 j 04:45	14°Z51'35	29.00628 AU
opposition	-3433 Jun 20 j 08:54	29°M20'36	0°32'25	opposition	-3426 Jul 06 j 02:22	14°Z50'06	0°-4'-53

Attention, astronomical year style is used: The year -3426 in astronomical counting style is the year 3427 BCE in historical counting style.

direct	-3426 Sep 22 j 08:45	13° \mathring{A} 27'25		max. Earth dist.	-3418 Jan 18 j 05:26	1° \mathring{C} 31'42	30.93555 AU
				retrograde	-3418 May 04 j 12:26	4° \mathring{C} 03'40	
conjunction	-3425 Jan 01 j 21:42	15° \mathring{A} 54'41	0°-7'-5	min. Earth dist.	-3418 Jul 23 j 07:41	2° \mathring{C} 40'01	28.93126 AU
minimum elong	-3425 Jan 01 j 21:43	15° \mathring{A} 54'41	0°07'13	opposition	-3418 Jul 24 j 07:09	2° \mathring{C} 38'23	0°-47'-7
behind sun begin	-3425 Jan 01 j 15:47	15° \mathring{A} 54'09		direct	-3418 Oct 10 j 02:06	1° \mathring{C} 15'24	
behind sun end	-3425 Jan 02 j 03:39	15° \mathring{A} 55'13					
max. Earth dist.	-3425 Jan 02 j 20:07	15° \mathring{A} 56'48	31.00279 AU	conjunction	-3417 Jan 19 j 17:31	3° \mathring{C} 42'53	0°-46'-23
retrograde	-3425 Apr 18 j 16:16	18° \mathring{A} 28'19		minimum elong	-3417 Jan 19 j 17:31	3° \mathring{C} 42'53	0°46'31
opposition	-3425 Jul 08 j 15:03	17° \mathring{A} 03'30	0°-10'-16	max. Earth dist.	-3417 Jan 20 j 18:32	3° \mathring{C} 45'15	30.92628 AU
min. Earth dist.	-3425 Jul 07 j 16:30	17° \mathring{A} 05'03	28.99960 AU	retrograde	-3417 May 07 j 00:08	6° \mathring{C} 17'11	
direct	-3425 Sep 24 j 19:36	15° \mathring{A} 40'49		opposition	-3417 Jul 26 j 19:24	4° \mathring{C} 51'51	0°-52'-10
				min. Earth dist.	-3417 Jul 25 j 19:56	4° \mathring{C} 53'29	28.92269 AU
conjunction	-3424 Jan 04 j 08:55	18° \mathring{A} 08'08	0°-12'-5	direct	-3417 Oct 12 j 13:50	3° \mathring{C} 28'51	
minimum elong	-3424 Jan 04 j 08:55	18° \mathring{A} 08'08	0°12'14				
behind sun begin	-3424 Jan 04 j 04:34	18° \mathring{A} 07'44		conjunction	-3416 Jan 22 j 05:19	5° \mathring{C} 56'22	0°-51'-4
behind sun end	-3424 Jan 04 j 13:16	18° \mathring{A} 08'32		minimum elong	-3416 Jan 22 j 05:19	5° \mathring{C} 56'22	0°51'13
max. Earth dist.	-3424 Jan 05 j 07:45	18° \mathring{A} 10'17	30.99565 AU	max. Earth dist.	-3416 Jan 23 j 06:13	5° \mathring{C} 58'44	30.91843 AU
retrograde	-3424 Apr 20 j 04:29	20° \mathring{A} 41'54		retrograde	-3416 May 08 j 14:13	8° \mathring{C} 30'45	
min. Earth dist.	-3424 Jul 09 j 06:10	19° \mathring{A} 18'32	28.99206 AU	min. Earth dist.	-3416 Jul 27 j 07:09	7° \mathring{C} 07'06	28.91553 AU
opposition	-3424 Jul 10 j 03:53	19° \mathring{A} 17'03	0°-15'-38	opposition	-3416 Jul 28 j 07:38	7° \mathring{C} 05'24	0°-57'-8
direct	-3424 Sep 26 j 05:55	17° \mathring{A} 54'22		direct	-3416 Oct 14 j 01:05	5° \mathring{C} 42'23	
conjunction	-3423 Jan 05 j 20:19	20° \mathring{A} 21'43	0°-17'-6	conjunction	-3415 Jan 23 j 17:11	8° \mathring{C} 10'00	0°-55'-41
minimum elong	-3423 Jan 05 j 20:19	20° \mathring{A} 21'43	0°17'14	minimum elong	-3415 Jan 23 j 17:10	8° \mathring{C} 10'00	0°55'49
max. Earth dist.	-3423 Jan 06 j 19:22	20° \mathring{A} 23'54	30.98760 AU	max. Earth dist.	-3415 Jan 24 j 18:40	8° \mathring{C} 12'24	30.91171 AU
retrograde	-3423 Apr 22 j 17:36	22° \mathring{A} 55'35		retrograde	-3415 May 11 j 02:45	10° \mathring{C} 44'28	
opposition	-3423 Jul 12 j 16:28	21° \mathring{A} 30'41	0°-20'-59	opposition	-3415 Jul 30 j 19:50	9° \mathring{C} 19'07	-1°-2'-1
min. Earth dist.	-3423 Jul 11 j 17:39	21° \mathring{A} 32'15	28.98338 AU	min. Earth dist.	-3415 Jul 29 j 20:01	9° \mathring{C} 20'46	28.90947 AU
direct	-3423 Sep 28 j 17:14	20° \mathring{A} 07'59		direct	-3415 Oct 16 j 11:22	7° \mathring{C} 56'07	
conjunction	-3422 Jan 08 j 07:42	22° \mathring{A} 35'21	0°-22'-5	conjunction	-3414 Jan 26 j 05:13	10° \mathring{C} 23'48	-1°00'-12
minimum elong	-3422 Jan 08 j 07:42	22° \mathring{A} 35'21	0°22'14	minimum elong	-3414 Jan 26 j 05:13	10° \mathring{C} 23'48	1°00'21
max. Earth dist.	-3422 Jan 09 j 06:17	22° \mathring{A} 37'29	30.97825 AU	max. Earth dist.	-3414 Jan 27 j 07:10	10° \mathring{C} 26'15	30.90625 AU
retrograde	-3422 Apr 25 j 06:04	25° \mathring{A} 09'19		retrograde	-3414 May 13 j 15:56	12° \mathring{C} 58'23	
min. Earth dist.	-3422 Jul 14 j 07:24	23° \mathring{A} 45'52	28.97352 AU	min. Earth dist.	-3414 Aug 01 j 06:57	11° \mathring{C} 34'47	28.90444 AU
opposition	-3422 Jul 15 j 05:19	23° \mathring{A} 44'21	0°-26'-19	opposition	-3414 Aug 02 j 07:59	11° \mathring{C} 33'02	-1°-6'-49
direct	-3422 Oct 01 j 03:37	22° \mathring{A} 21'37		direct	-3414 Oct 18 j 22:27	10° \mathring{C} 10'02	
conjunction	-3421 Jan 10 j 19:11	24° \mathring{A} 48'59	0°-27'-2	conjunction	-3413 Jan 28 j 17:16	12° \mathring{C} 37'50	-1°-4'-39
minimum elong	-3421 Jan 10 j 19:11	24° \mathring{A} 48'59	0°27'10	minimum elong	-3413 Jan 28 j 17:16	12° \mathring{C} 37'50	1°04'47
max. Earth dist.	-3421 Jan 11 j 18:48	24° \mathring{A} 51'13	30.96792 AU	max. Earth dist.	-3413 Jan 29 j 18:52	12° \mathring{C} 40'15	30.90142 AU
retrograde	-3421 Apr 27 j 19:04	27° \mathring{A} 23'01		retrograde	-3413 May 16 j 04:13	15° \mathring{C} 12'31	
opposition	-3421 Jul 17 j 17:54	25° \mathring{A} 57'58	0°-31'-35	opposition	-3413 Aug 04 j 20:16	13° \mathring{C} 47'12	-1°-11'-31
min. Earth dist.	-3421 Jul 16 j 19:02	25° \mathring{A} 59'33	28.96273 AU	min. Earth dist.	-3413 Aug 03 j 20:15	13° \mathring{C} 48'52	28.89987 AU
direct	-3421 Oct 03 j 15:32	24° \mathring{A} 35'10		direct	-3413 Oct 21 j 08:05	12° \mathring{C} 24'12	
conjunction	-3420 Jan 13 j 06:41	27° \mathring{A} 02'33	0°-31'-57	conjunction	-3412 Jan 31 j 05:47	14° \mathring{C} 52'06	-1°-9'00
minimum elong	-3420 Jan 13 j 06:41	27° \mathring{A} 02'33	0°32'06	minimum elong	-3412 Jan 31 j 05:47	14° \mathring{C} 52'06	1°09'08
max. Earth dist.	-3420 Jan 14 j 05:31	27° \mathring{A} 04'42	30.95689 AU	max. Earth dist.	-3412 Feb 01 j 08:10	14° \mathring{C} 54'35	30.89683 AU
retrograde	-3420 Apr 29 j 08:41	29° \mathring{A} 36'38		retrograde	-3412 May 17 j 17:26	17° \mathring{C} 26'52	
min. Earth dist.	-3420 Jul 18 j 08:03	28° \mathring{A} 13'03	28.95173 AU	min. Earth dist.	-3412 Aug 05 j 07:35	16° \mathring{C} 03'17	28.89514 AU
opposition	-3420 Jul 19 j 06:22	28° \mathring{A} 11'30	0°-36'-49	opposition	-3412 Aug 06 j 08:13	16° \mathring{C} 01'34	-1°-16'-7
direct	-3420 Oct 05 j 01:40	26° \mathring{A} 48'38		direct	-3412 Oct 22 j 18:54	14° \mathring{C} 38'34	
conjunction	-3419 Jan 14 j 18:21	29° \mathring{A} 16'02	0°-36'-49	conjunction	-3411 Feb 01 j 18:17	17° \mathring{C} 06'34	-1°-13'-15
minimum elong	-3419 Jan 14 j 18:21	29° \mathring{A} 16'02	0°36'57	minimum elong	-3411 Feb 01 j 18:16	17° \mathring{C} 06'34	1°13'23
max. Earth dist.	-3419 Jan 15 j 18:35	29° \mathring{A} 18'19	30.94589 AU	max. Earth dist.	-3411 Feb 02 j 19:26	17° \mathring{C} 08'57	30.89178 AU
	-3419 Feb 03 j 09:39	0° \mathring{C}		retrograde	-3411 May 20 j 07:26	19° \mathring{C} 41'25	
retrograde	-3419 May 01 j 21:41	1° \mathring{C} 50'10		opposition	-3411 Aug 08 j 20:27	18° \mathring{C} 16'07	-1°-20'-36
opposition	-3419 Jul 21 j 18:44	0° \mathring{C} 24'58	0°-42'00	min. Earth dist.	-3411 Aug 07 j 20:49	18° \mathring{C} 17'46	28.88987 AU
min. Earth dist.	-3419 Jul 20 j 19:45	0° \mathring{C} 26'33	28.94098 AU	direct	-3411 Oct 25 j 04:38	16° \mathring{C} 53'06	
	-3419 Aug 06 j 01:03	30° \mathring{R} \mathring{A}					
direct	-3419 Oct 07 j 14:50	29° \mathring{A} 02'02		conjunction	-3410 Feb 04 j 06:54	19° \mathring{C} 21'11	-1°-17'-23
	-3419 Dec 05 j 23:30	0° \mathring{C}		minimum elong	-3410 Feb 04 j 06:54	19° \mathring{C} 21'11	1°17'31
				max. Earth dist.	-3410 Feb 05 j 08:51	19° \mathring{C} 23'38	30.88596 AU
conjunction	-3418 Jan 17 j 05:45	1° \mathring{C} 29'27	0°-41'-38	retrograde	-3410 May 22 j 20:52	21° \mathring{C} 56'05	
minimum elong	-3418 Jan 17 j 05:45	1° \mathring{C} 29'27	0°41'47	min. Earth dist.	-3410 Aug 10 j 08:54	20° \mathring{C} 32'25	28.88356 AU

Attention, astronomical year style is used: The year -3410 in astronomical counting style is the year 3411 BCE in historical counting style.

opposition	-3410 Aug 11 j 08:34	20° $\overline{30}$ '46	-1°-24'-58	opposition	-3402 Aug 29 j 06:40	8° \approx 26'33	-1°-54'-45
direct	-3410 Oct 27 j 17:45	19° $\overline{30}$ '42		direct	-3402 Nov 14 j 12:07	7° \approx 03'01	
conjunction	-3409 Feb 06 j 19:40	21° $\overline{35}$ '52	-1°-21'-25	conjunction	-3401 Feb 25 j 04:02	9° \approx 31'47	-1°-48'-42
minimum elong	-3409 Feb 06 j 19:40	21° $\overline{35}$ '52	1°21'32	minimum elong	-3401 Feb 25 j 04:02	9° \approx 31'47	1°48'49
max. Earth dist.	-3409 Feb 07 j 20:10	21° $\overline{38}$ '10	30.87924 AU	max. Earth dist.	-3401 Feb 26 j 04:44	9° \approx 34'06	30.83961 AU
retrograde	-3409 May 25 j 11:39	24° $\overline{10}$ '47		retrograde	-3401 Jun 12 j 18:58	12° \approx 06'40	
opposition	-3409 Aug 13 j 20:35	22° $\overline{45}$ '25	-1°-29'-12	opposition	-3401 Aug 31 j 18:06	10° \approx 41'13	-1°-57'-45
min. Earth dist.	-3409 Aug 12 j 21:17	22° $\overline{47}$ '03	28.87653 AU	min. Earth dist.	-3401 Aug 30 j 20:12	10° \approx 42'45	28.84075 AU
direct	-3409 Oct 30 j 05:06	21° $\overline{22}$ '17		direct	-3401 Nov 17 j 00:07	9° \approx 17'40	
conjunction	-3408 Feb 09 j 08:36	23° $\overline{50}$ '31	-1°-25'-19	conjunction	-3400 Feb 27 j 17:33	11° \approx 46'34	-1°-51'-25
minimum elong	-3408 Feb 09 j 08:36	23° $\overline{50}$ '31	1°25'27	minimum elong	-3400 Feb 27 j 17:33	11° \approx 46'34	1°51'32
max. Earth dist.	-3408 Feb 10 j 09:40	23° $\overline{52}$ '53	30.87179 AU	max. Earth dist.	-3400 Feb 28 j 16:42	11° \approx 48'44	30.83935 AU
retrograde	-3408 May 26 j 23:59	26° $\overline{25}$ '26		retrograde	-3400 Jun 14 j 09:38	14° \approx 21'28	
min. Earth dist.	-3408 Aug 14 j 09:52	25° $\overline{01}$ '37	28.86893 AU	min. Earth dist.	-3400 Sep 01 j 08:19	12° \approx 57'34	28.84066 AU
opposition	-3408 Aug 15 j 08:33	25° $\overline{00}$ '01	-1°-33'-18	opposition	-3400 Sep 02 j 05:41	12° \approx 56'04	-2°00'-34
direct	-3408 Oct 31 j 17:08	23° $\overline{36}$ '49		direct	-3400 Nov 18 j 10:38	11° \approx 32'31	
conjunction	-3407 Feb 10 j 21:23	26° $\overline{05}$ '05	-1°-29'-5				
minimum elong	-3407 Feb 10 j 21:23	26° $\overline{05}$ '05	1°29'13				
max. Earth dist.	-3407 Feb 11 j 21:43	26° $\overline{07}$ '23	30.86422 AU				
retrograde	-3407 May 29 j 15:01	28° $\overline{39}$ '59					
opposition	-3407 Aug 17 j 20:20	27° $\overline{14}$ '32	-1°-37'-16				
min. Earth dist.	-3407 Aug 16 j 21:14	27° $\overline{16}$ '09	28.86157 AU				
direct	-3407 Nov 03 j 05:47	25° $\overline{51}$ '14					
conjunction	-3406 Feb 13 j 10:18	28° $\overline{19}$ '34	-1°-32'-43				
minimum elong	-3406 Feb 13 j 10:17	28° $\overline{19}$ '34	1°32'51				
max. Earth dist.	-3406 Feb 14 j 10:51	28° $\overline{21}$ '53	30.85702 AU				
	-3406 Apr 02 j 18:30	0° \approx					
retrograde	-3406 Jun 01 j 03:32	0° \approx 54'27					
	-3406 Aug 01 j 10:39	30° \overline{R}					
min. Earth dist.	-3406 Aug 19 j 10:03	29° $\overline{30}$ '30	28.85492 AU				
opposition	-3406 Aug 20 j 08:09	29° $\overline{28}$ '57	-1°-41'-5				
direct	-3406 Nov 05 j 17:18	28° $\overline{05}$ '35					
	-3405 Jan 31 j 19:30	0° \approx					
conjunction	-3405 Feb 15 j 23:16	0° \approx 33'58	-1°-36'-13				
minimum elong	-3405 Feb 15 j 23:16	0° \approx 33'58	1°36'20				
max. Earth dist.	-3405 Feb 16 j 23:53	0° \approx 36'17	30.85093 AU				
retrograde	-3405 Jun 03 j 16:35	3° \approx 08'50					
opposition	-3405 Aug 22 j 19:48	1° \approx 43'18	-1°-44'-44				
min. Earth dist.	-3405 Aug 21 j 20:45	1° \approx 44'55	28.84945 AU				
direct	-3405 Nov 08 j 05:20	0° \approx 19'52					
conjunction	-3404 Feb 18 j 12:19	2° \approx 48'20	-1°-39'-34				
minimum elong	-3404 Feb 18 j 12:19	2° \approx 48'20	1°39'41				
max. Earth dist.	-3404 Feb 19 j 12:22	2° \approx 50'36	30.84598 AU				
retrograde	-3404 Jun 05 j 04:35	5° \approx 23'12					
min. Earth dist.	-3404 Aug 23 j 09:25	3° \approx 59'12	28.84533 AU				
opposition	-3404 Aug 24 j 07:25	3° \approx 57'39	-1°-48'-14				
direct	-3404 Nov 09 j 15:14	2° \approx 34'10					
conjunction	-3403 Feb 20 j 01:32	5° \approx 02'43	-1°-42'-46				
minimum elong	-3403 Feb 20 j 01:31	5° \approx 02'43	1°42'53				
max. Earth dist.	-3403 Feb 21 j 02:20	5° \approx 05'03	30.84257 AU				
retrograde	-3403 Jun 07 j 17:40	7° \approx 37'34					
opposition	-3403 Aug 26 j 18:58	6° \approx 12'03	-1°-51'-35				
min. Earth dist.	-3403 Aug 25 j 20:09	6° \approx 13'39	28.84263 AU				
direct	-3403 Nov 12 j 02:20	4° \approx 48'32					
conjunction	-3402 Feb 22 j 14:32	7° \approx 17'11	-1°-45'-49				
minimum elong	-3402 Feb 22 j 14:32	7° \approx 17'11	1°45'56				
max. Earth dist.	-3402 Feb 23 j 14:21	7° \approx 19'25	30.84052 AU				
retrograde	-3402 Jun 10 j 06:26	9° \approx 52'03					
min. Earth dist.	-3402 Aug 28 j 08:44	8° \approx 28'06	28.84128 AU				

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Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

conjunction	-3400 Feb 27 j 17:33	11°46'34	-1°-51'-25	opposition	-3393 Sep 18 j 13:16	28°42'00	-2°-14'-58
minimum elong	-3400 Feb 27 j 17:33	11°46'34	1°51'32	min. Earth dist.	-3393 Sep 17 j 21:03	28°43'09	28.82548 AU
max. Earth dist.	-3400 Feb 28 j 16:42	11°48'44	30.83935 AU	direct	-3393 Dec 04 j 20:31	27°18'04	
retrograde	-3400 Jun 14 j 09:38	14°21'28					
min. Earth dist.	-3400 Sep 01 j 08:19	12°57'34	28.84066 AU	conjunction	-3392 Mar 17 j 09:18	29°47'46	-2°-6'-49
opposition	-3400 Sep 02 j 05:41	12°56'04	-2°00'-34	minimum elong	-3392 Mar 17 j 09:18	29°47'46	2°06'53
direct	-3400 Nov 18 j 10:38	11°32'31		max. Earth dist.	-3392 Mar 18 j 04:03	29°49'31	30.82311 AU
					-3392 Mar 22 j 19:58	0°	
conjunction	-3399 Mar 01 j 07:15	14°01'33	-1°-53'-59	retrograde	-3392 Jul 02 j 17:36	2°22'15	
minimum elong	-3399 Mar 01 j 07:14	14°01'33	1°54'05	min. Earth dist.	-3392 Sep 19 j 08:12	0°58'07	28.82428 AU
max. Earth dist.	-3399 Mar 02 j 06:45	14°03'45	30.83902 AU	opposition	-3392 Sep 20 j 00:21	0°56'58	-2°-16'-13
	-3399 Mar 27 j 21:00	15°			-3392 Oct 26 j 17:39	30°	
retrograde	-3399 Jun 16 j 22:29	16°36'27		direct	-3392 Dec 06 j 08:29	29°32'57	
opposition	-3399 Sep 04 j 17:15	15°11'06	-2°-3'-12		-3391 Jan 15 j 07:44	0°	
min. Earth dist.	-3399 Sep 03 j 20:50	15°12'32	28.84016 AU				
	-3399 Sep 11 j 06:54	15°		conjunction	-3391 Mar 19 j 23:12	2°02'45	-2°-7'-53
direct	-3399 Nov 20 j 22:23	13°47'32		minimum elong	-3391 Mar 19 j 23:12	2°02'45	2°07'58
	-3398 Jan 27 j 05:30	15°		max. Earth dist.	-3391 Mar 20 j 16:20	2°04'21	30.82257 AU
				retrograde	-3391 Jul 05 j 07:09	4°37'10	
conjunction	-3398 Mar 03 j 21:04	16°16'42	-1°-56'-21	opposition	-3391 Sep 22 j 11:26	3°11'54	-2°-17'-16
minimum elong	-3398 Mar 03 j 21:04	16°16'42	1°56'28	min. Earth dist.	-3391 Sep 21 j 19:41	3°13'02	28.82451 AU
max. Earth dist.	-3398 Mar 04 j 19:07	16°18'46	30.83826 AU	direct	-3391 Dec 08 j 18:34	1°47'50	
retrograde	-3398 Jun 19 j 14:13	18°51'35					
min. Earth dist.	-3398 Sep 06 j 08:29	17°27'42	28.83902 AU	conjunction	-3390 Mar 22 j 13:27	4°17'45	-2°-8'-46
opposition	-3398 Sep 07 j 04:44	17°26'16	-2°-5'-39	minimum elong	-3390 Mar 22 j 13:27	4°17'45	2°08'50
direct	-3398 Nov 23 j 11:00	16°02'40		max. Earth dist.	-3390 Mar 23 j 07:05	4°19'23	30.82342 AU
				retrograde	-3390 Jul 07 j 18:50	6°52'05	
conjunction	-3397 Mar 06 j 11:04	18°31'57	-1°-58'-34	opposition	-3390 Sep 24 j 22:25	5°26'52	-2°-18'-6
minimum elong	-3397 Mar 06 j 11:04	18°31'57	1°58'40	min. Earth dist.	-3390 Sep 24 j 07:27	5°27'56	28.82600 AU
max. Earth dist.	-3397 Mar 07 j 08:39	18°33'59	30.83651 AU	direct	-3390 Dec 11 j 06:16	4°02'47	
retrograde	-3397 Jun 22 j 02:56	21°06'49					
opposition	-3397 Sep 09 j 16:21	19°41'31	-2°-7'-54	conjunction	-3389 Mar 25 j 03:41	6°32'47	-2°-9'-27
min. Earth dist.	-3397 Sep 08 j 21:46	19°42'49	28.83682 AU	minimum elong	-3389 Mar 25 j 03:40	6°32'47	2°09'32
direct	-3397 Nov 25 j 22:59	18°17'52		max. Earth dist.	-3389 Mar 25 j 19:53	6°34'18	30.82563 AU
				retrograde	-3389 Jul 10 j 09:33	9°07'03	
conjunction	-3396 Mar 08 j 01:08	20°47'14	-2°00'-35	opposition	-3389 Sep 27 j 09:23	7°41'54	-2°-18'-43
minimum elong	-3396 Mar 08 j 01:08	20°47'14	2°00'40	min. Earth dist.	-3389 Sep 26 j 18:26	7°42'58	28.82870 AU
max. Earth dist.	-3396 Mar 08 j 21:48	20°49'10	30.83393 AU	direct	-3389 Dec 13 j 19:05	6°17'47	
retrograde	-3396 Jun 23 j 16:55	23°22'02					
min. Earth dist.	-3396 Sep 10 j 08:48	21°58'04	28.83388 AU	conjunction	-3388 Mar 26 j 18:03	8°47'56	-2°-9'-56
opposition	-3396 Sep 11 j 03:35	21°56'44	-2°-9'-58	minimum elong	-3388 Mar 26 j 18:04	8°47'56	2°10'00
direct	-3396 Nov 27 j 11:37	20°33'01		max. Earth dist.	-3388 Mar 27 j 10:07	8°49'26	30.82862 AU
				retrograde	-3388 Jul 11 j 21:31	11°22'07	
conjunction	-3395 Mar 10 j 15:05	23°02'28	-2°-2'-25	opposition	-3388 Sep 28 j 20:21	9°57'03	-2°-19'-8
minimum elong	-3395 Mar 10 j 15:05	23°02'28	2°02'31	min. Earth dist.	-3388 Sep 28 j 07:02	9°57'59	28.83198 AU
max. Earth dist.	-3395 Mar 11 j 10:37	23°04'18	30.83071 AU	direct	-3388 Dec 15 j 06:46	8°32'54	
retrograde	-3395 Jun 26 j 05:38	25°37'12					
opposition	-3395 Sep 13 j 15:00	24°11'54	-2°-11'-50	conjunction	-3387 Mar 29 j 08:30	11°03'10	-2°-10'-13
min. Earth dist.	-3395 Sep 12 j 21:48	24°13'07	28.83066 AU	minimum elong	-3387 Mar 29 j 08:30	11°03'10	2°10'17
direct	-3395 Nov 29 j 22:17	22°48'07		max. Earth dist.	-3387 Mar 29 j 23:31	11°04'34	30.83214 AU
				retrograde	-3387 Jul 14 j 12:21	13°37'17	
conjunction	-3394 Mar 13 j 05:03	25°17'39	-2°-4'-4	opposition	-3387 Oct 01 j 07:14	12°12'17	-2°-19'-19
minimum elong	-3394 Mar 13 j 05:03	25°17'39	2°04'09	min. Earth dist.	-3387 Sep 30 j 17:49	12°13'14	28.83544 AU
max. Earth dist.	-3394 Mar 14 j 00:43	25°19'29	30.82758 AU	direct	-3387 Dec 17 j 19:30	10°48'07	
retrograde	-3394 Jun 28 j 18:46	27°52'18					
min. Earth dist.	-3394 Sep 15 j 08:40	26°28'14	28.82767 AU	conjunction	-3386 Mar 31 j 22:56	13°18'30	-2°-10'-18
opposition	-3394 Sep 16 j 02:10	26°27'00	-2°-13'-30	minimum elong	-3386 Mar 31 j 22:56	13°18'30	2°10'21
direct	-3394 Dec 02 j 10:07	25°03'08		max. Earth dist.	-3386 Apr 01 j 12:40	13°19'47	30.83532 AU
				retrograde	-3386 Jul 17 j 01:45	15°52'32	
conjunction	-3393 Mar 15 j 19:04	27°32'44	-2°-5'-32	opposition	-3386 Oct 03 j 18:19	14°27'34	-2°-19'-18
minimum elong	-3393 Mar 15 j 19:04	27°32'44	2°05'37	min. Earth dist.	-3386 Oct 03 j 06:51	14°28'23	28.83834 AU
max. Earth dist.	-3393 Mar 16 j 13:15	27°34'26	30.82487 AU	direct	-3386 Dec 20 j 07:01	13°03'22	
	-3393 Jun 10 j 05:15	0°					
retrograde	-3393 Jul 01 j 06:12	0°07'19		conjunction	-3385 Apr 03 j 13:42	15°33'51	-2°-10'-11
	-3393 Jul 22 j 09:59	30°		minimum elong	-3385 Apr 03 j 13:42	15°33'51	2°10'14

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Attention, astronomical year style is used: The year -3385 in astronomical counting style is the year 3386 BCE in historical counting style.

max. Earth dist.	-3385 Apr 04 j 02:44	15° H 35'05	30.83784 AU	max. Earth dist.	-3377 Apr 22 j 15:06	3° Y 33'13	30.85419 AU
retrograde	-3385 Jul 19 j 15:00	18° H 07'46		retrograde	-3377 Aug 06 j 16:01	6° Y 05'29	
opposition	-3385 Oct 06 j 05:07	16° H 42'51	-2°-19'-4	opposition	-3377 Oct 23 j 18:17	4° Y 40'52	-2°-9'-45
min. Earth dist.	-3385 Oct 05 j 17:53	16° H 43'39	28.84029 AU	min. Earth dist.	-3377 Oct 23 j 14:03	4° Y 41'10	28.85878 AU
direct	-3385 Dec 22 j 20:01	15° H 18'36		direct	-3376 Jan 09 j 18:54	3° Y 16'07	
conjunction	-3384 Apr 05 j 04:21	17° H 49'10	-2°-9'-52	conjunction	-3376 Apr 24 j 00:20	5° Y 47'19	-2°00'-24
minimum elong	-3384 Apr 05 j 04:21	17° H 49'10	2°09'54	minimum elong	-3376 Apr 24 j 00:21	5° Y 47'19	2°00'24
max. Earth dist.	-3384 Apr 05 j 15:19	17° H 50'11	30.83934 AU	max. Earth dist.	-3376 Apr 24 j 05:15	5° Y 47'47	30.86096 AU
retrograde	-3384 Jul 21 j 02:55	20° H 22'57		retrograde	-3376 Aug 08 j 05:00	8° Y 19'58	
opposition	-3384 Oct 07 j 16:08	18° H 58'04	-2°-18'-38	opposition	-3376 Oct 25 j 04:43	6° Y 55'28	-2°-7'-41
min. Earth dist.	-3384 Oct 07 j 06:35	18° H 58'45	28.84142 AU	min. Earth dist.	-3376 Oct 25 j 00:21	6° Y 55'46	28.86593 AU
direct	-3384 Dec 24 j 06:52	17° H 33'44		direct	-3375 Jan 11 j 08:03	5° Y 30'43	
conjunction	-3383 Apr 07 j 18:55	20° H 04'22	-2°-9'-22	conjunction	-3375 Apr 26 j 14:38	8° Y 02'02	-1°-58'-22
minimum elong	-3383 Apr 07 j 18:55	20° H 04'22	2°09'25	minimum elong	-3375 Apr 26 j 14:39	8° Y 02'02	1°58'23
max. Earth dist.	-3383 Apr 08 j 05:54	20° H 05'23	30.84014 AU	max. Earth dist.	-3375 Apr 26 j 17:58	8° Y 02'20	30.86853 AU
retrograde	-3383 Jul 23 j 14:29	22° H 38'00		retrograde	-3375 Aug 10 j 17:16	10° Y 34'34	
opposition	-3383 Oct 10 j 02:57	21° H 13'08	-2°-17'-59	opposition	-3375 Oct 27 j 15:17	9° Y 10'10	-2°-5'-24
min. Earth dist.	-3383 Oct 09 j 17:59	21° H 13'46	28.84189 AU	min. Earth dist.	-3375 Oct 27 j 12:29	9° Y 10'22	28.87374 AU
direct	-3383 Dec 26 j 19:18	19° H 48'43		direct	-3374 Jan 13 j 18:40	7° Y 45'25	
conjunction	-3382 Apr 10 j 09:26	22° H 19'25	-2°-8'-39	conjunction	-3374 Apr 29 j 05:19	10° Y 16'51	-1°-56'-9
minimum elong	-3382 Apr 10 j 09:26	22° H 19'25	2°08'41	minimum elong	-3374 Apr 29 j 05:20	10° Y 16'51	1°56'08
max. Earth dist.	-3382 Apr 10 j 18:14	22° H 20'14	30.84061 AU	max. Earth dist.	-3374 Apr 29 j 08:34	10° Y 17'09	30.87641 AU
retrograde	-3382 Jul 26 j 03:05	24° H 52'53		retrograde	-3374 Aug 13 j 05:40	12° Y 49'15	
opposition	-3382 Oct 12 j 13:36	23° H 28'02	-2°-17'-7	opposition	-3374 Oct 30 j 01:40	11° Y 24'58	-2°-2'-56
min. Earth dist.	-3382 Oct 12 j 05:33	23° H 28'37	28.84243 AU	min. Earth dist.	-3374 Oct 29 j 23:39	11° Y 25'07	28.88138 AU
direct	-3382 Dec 29 j 05:45	22° H 03'32		direct	-3373 Jan 16 j 06:54	10° Y 00'13	
conjunction	-3381 Apr 13 j 00:07	24° H 34'17	-2°-7'-46	conjunction	-3373 May 01 j 19:57	12° Y 31'45	-1°-53'-45
minimum elong	-3381 Apr 13 j 00:07	24° H 34'17	2°07'48	minimum elong	-3373 May 01 j 19:57	12° Y 31'45	1°53'46
max. Earth dist.	-3381 Apr 13 j 09:01	24° H 35'07	30.84125 AU	max. Earth dist.	-3373 May 01 j 20:45	12° Y 31'49	30.88384 AU
retrograde	-3381 Jul 28 j 13:28	27° H 07'36		retrograde	-3373 Aug 15 j 17:57	15° Y 04'01	
opposition	-3381 Oct 15 j 00:15	25° H 42'47	-2°-16'-3	opposition	-3373 Nov 01 j 12:14	13° Y 39'49	-2°00'-17
min. Earth dist.	-3381 Oct 14 j 17:18	25° H 43'17	28.84326 AU	min. Earth dist.	-3373 Nov 01 j 11:18	13° Y 39'53	28.88846 AU
direct	-3381 Dec 31 j 18:01	24° H 18'12		direct	-3372 Jan 18 j 17:17	12° Y 15'01	
conjunction	-3380 Apr 14 j 14:31	26° H 49'01	-2°-6'-40	conjunction	-3372 May 03 j 10:36	14° Y 46'38	-1°-51'-12
minimum elong	-3380 Apr 14 j 14:31	26° H 49'01	2°06'41	minimum elong	-3372 May 03 j 10:37	14° Y 46'38	1°51'10
max. Earth dist.	-3380 Apr 14 j 21:40	26° H 49'41	30.84256 AU	max. Earth dist.	-3372 May 03 j 11:11	14° Y 46'41	30.89044 AU
retrograde	-3380 Jul 30 j 02:30	29° H 22'11		retrograde	-3372 Aug 17 j 03:39	17° Y 18'45	
opposition	-3380 Oct 16 j 10:46	27° H 57'23	-2°-14'-47	opposition	-3372 Nov 02 j 22:47	15° Y 54'37	-1°-57'-27
min. Earth dist.	-3380 Oct 16 j 03:51	27° H 57'52	28.84508 AU	min. Earth dist.	-3372 Nov 02 j 23:15	15° Y 54'35	28.89453 AU
direct	-3379 Jan 02 j 06:34	26° H 32'43		direct	-3371 Jan 20 j 05:42	14° Y 29'47	
conjunction	-3379 Apr 17 j 04:58	29° H 03'38	-2°-5'-23	conjunction	-3371 May 06 j 01:05	17° Y 01'27	-1°-48'-28
minimum elong	-3379 Apr 17 j 04:59	29° H 03'38	2°05'25	minimum elong	-3371 May 06 j 01:06	17° Y 01'27	1°48'28
max. Earth dist.	-3379 Apr 17 j 12:08	29° H 04'18	30.84494 AU	max. Earth dist.	-3371 May 05 j 23:21	17° Y 01'17	30.89626 AU
	-3379 May 12 j 23:36	0° Y		retrograde	-3371 Aug 19 j 15:54	19° Y 33'23	
retrograde	-3379 Aug 01 j 13:28	1° Y 36'39		opposition	-3371 Nov 05 j 09:09	18° Y 09'18	-1°-54'-27
opposition	-3379 Oct 18 j 21:20	0° Y 11'54	-2°-13'-19	min. Earth dist.	-3371 Nov 05 j 10:03	18° Y 09'14	28.89997 AU
min. Earth dist.	-3379 Oct 18 j 15:54	0° Y 12'17	28.84817 AU	direct	-3370 Jan 22 j 17:41	16° Y 44'24	
	-3379 Oct 25 j 20:30	30° R H					
direct	-3378 Jan 04 j 18:05	28° H 47'11		conjunction	-3370 May 08 j 15:38	19° Y 16'06	-1°-45'-35
	-3378 Mar 14 j 03:01	0° Y		minimum elong	-3370 May 08 j 15:38	19° Y 16'06	1°45'33
				max. Earth dist.	-3370 May 08 j 13:30	19° Y 15'54	30.90141 AU
conjunction	-3378 Apr 19 j 19:19	1° Y 18'10	-2°-3'-55	retrograde	-3370 Aug 22 j 02:09	21° Y 47'51	
minimum elong	-3378 Apr 19 j 19:19	1° Y 18'10	2°03'55	opposition	-3370 Nov 07 j 19:39	20° Y 23'48	-1°-51'-16
max. Earth dist.	-3378 Apr 20 j 01:27	1° Y 18'45	30.84889 AU	min. Earth dist.	-3370 Nov 07 j 22:28	20° Y 23'36	28.90485 AU
retrograde	-3378 Aug 04 j 03:21	3° Y 51'04		direct	-3369 Jan 25 j 04:52	18° Y 58'49	
opposition	-3378 Oct 21 j 07:47	2° Y 26'22	-2°-11'-38				
min. Earth dist.	-3378 Oct 21 j 01:58	2° Y 26'47	28.85276 AU	conjunction	-3369 May 11 j 06:03	21° Y 30'33	-1°-42'-32
direct	-3377 Jan 07 j 07:09	1° Y 01'37		minimum elong	-3369 May 11 j 06:04	21° Y 30'33	1°42'31
				max. Earth dist.	-3369 May 11 j 02:23	21° Y 30'13	30.90635 AU
conjunction	-3377 Apr 22 j 09:49	3° Y 32'43	-2°-2'-15	retrograde	-3369 Aug 24 j 14:26	24° Y 02'06	
minimum elong	-3377 Apr 22 j 09:49	3° Y 32'43	2°02'16	opposition	-3369 Nov 10 j 05:50	22° Y 38'05	-1°-47'-56

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Attention, astronomical year style is used: The year -3369 in astronomical counting style is the year 3370 BCE in historical counting style.

min. Earth dist.	-3369 Nov 10 j 08:37	22° Υ 37'53	28.90973 AU	min. Earth dist.	-3361 Nov 28 j 02:02	10° 8 27'33	28.98089 AU
direct	-3368 Jan 27 j 18:49	21° Υ 13'02		direct	-3360 Feb 14 j 18:11	9° 8 03'04	
conjunction	-3368 May 12 j 20:23	23° Υ 44'48	-1°-39'-20	conjunction	-3360 May 31 j 12:37	11° 8 35'16	-1°-8'-53
minimum elong	-3368 May 12 j 20:23	23° Υ 44'48	1°39'18	minimum elong	-3360 May 31 j 12:37	11° 8 35'16	1°08'49
max. Earth dist.	-3368 May 12 j 15:52	23° Υ 44'23	30.91141 AU	max. Earth dist.	-3360 May 31 j 01:01	11° 8 34'11	30.98537 AU
retrograde	-3368 Aug 26 j 01:36	26° Υ 16'09		retrograde	-3360 Sep 12 j 20:55	14° 8 05'21	
opposition	-3368 Nov 11 j 16:16	24° Υ 52'09	-1°-44'-27	opposition	-3360 Nov 29 j 02:41	12° 8 42'05	-1°-11'-21
min. Earth dist.	-3368 Nov 11 j 20:43	24° Υ 51'50	28.91513 AU	min. Earth dist.	-3360 Nov 29 j 12:27	12° 8 41'24	28.99052 AU
direct	-3367 Jan 29 j 07:14	23° Υ 27'02		direct	-3359 Feb 16 j 07:46	11° 8 16'54	
conjunction	-3367 May 15 j 10:26	25° Υ 58'49	-1°-36'00	conjunction	-3359 Jun 03 j 02:28	13° 8 49'09	-1°-4'-33
minimum elong	-3367 May 15 j 10:27	25° Υ 58'49	1°35'58	minimum elong	-3359 Jun 03 j 02:28	13° 8 49'09	1°04'29
max. Earth dist.	-3367 May 15 j 05:25	25° Υ 58'21	30.91731 AU	max. Earth dist.	-3359 Jun 02 j 13:55	13° 8 47'59	30.99441 AU
retrograde	-3367 Aug 28 j 13:36	28° Υ 29'58			-3359 Jul 06 j 02:13	15° 8	
opposition	-3367 Nov 14 j 02:30	27° Υ 06'01	-1°-40'-48	retrograde	-3359 Sep 15 j 07:39	16° 8 19'05	
min. Earth dist.	-3367 Nov 14 j 06:45	27° Υ 05'43	28.92140 AU		-3359 Nov 29 j 02:53	15° R 8	
direct	-3366 Jan 31 j 21:12	25° Υ 40'50		opposition	-3359 Dec 01 j 13:13	14° 8 55'53	-1°-6'-40
conjunction	-3366 May 18 j 00:32	28° Υ 12'39	-1°-32'-31	min. Earth dist.	-3359 Dec 02 j 00:56	14° 8 55'04	28.99902 AU
minimum elong	-3366 May 18 j 00:32	28° Υ 12'39	1°32'28	direct	-3358 Feb 18 j 19:55	13° 8 30'41	
max. Earth dist.	-3366 May 17 j 18:07	28° Υ 12'04	30.92420 AU		-3358 May 07 j 13:51	15° 8	
	-3366 Jul 10 j 06:48	0° 8		conjunction	-3358 Jun 05 j 16:22	16° 8 02'58	-1°00'-8
retrograde	-3366 Aug 31 j 01:31	0° 8 43'37		minimum elong	-3358 Jun 05 j 16:23	16° 8 02'58	1°00'03
	-3366 Oct 22 j 21:17	30° R Υ		max. Earth dist.	-3358 Jun 05 j 02:46	16° 8 01'42	31.00247 AU
opposition	-3366 Nov 16 j 12:44	29° Υ 19'43	-1°-37'00	retrograde	-3358 Sep 17 j 19:19	18° 8 32'43	
min. Earth dist.	-3366 Nov 16 j 18:15	29° Υ 19'20	28.92900 AU	opposition	-3358 Dec 03 j 23:29	17° 8 09'35	-1°-1'-54
direct	-3365 Feb 03 j 08:24	27° Υ 54'31		min. Earth dist.	-3358 Dec 04 j 11:24	17° 8 08'44	29.00645 AU
	-3365 May 08 j 17:23	0° 8		direct	-3357 Feb 21 j 09:54	15° 8 44'20	
conjunction	-3365 May 20 j 14:44	0° 8 26'23	-1°-28'-54	conjunction	-3357 Jun 08 j 06:08	18° 8 16'38	0°-55'-37
minimum elong	-3365 May 20 j 14:44	0° 8 26'23	1°28'52	minimum elong	-3357 Jun 08 j 06:09	18° 8 16'38	0°55'33
max. Earth dist.	-3365 May 20 j 08:32	0° 8 25'48	30.93254 AU	max. Earth dist.	-3357 Jun 07 j 14:55	18° 8 15'13	31.00953 AU
retrograde	-3365 Sep 02 j 13:22	2° 8 57'10		retrograde	-3357 Sep 20 j 07:10	20° 8 46'13	
opposition	-3365 Nov 18 j 23:03	1° 8 33'21	-1°-33'-4	opposition	-3357 Dec 06 j 09:57	19° 8 23'07	0°-57'-2
min. Earth dist.	-3365 Nov 19 j 04:52	1° 8 32'56	28.93789 AU	min. Earth dist.	-3357 Dec 06 j 23:21	19° 8 22'10	29.01329 AU
direct	-3364 Feb 05 j 21:42	0° 8 08'08		direct	-3356 Feb 23 j 21:48	17° 8 57'50	
conjunction	-3364 May 22 j 04:33	2° 8 40'02	-1°-25'-9	conjunction	-3356 Jun 09 j 19:39	20° 8 30'07	0°-51'-2
minimum elong	-3364 May 22 j 04:33	2° 8 40'02	1°25'06	minimum elong	-3356 Jun 09 j 19:39	20° 8 30'08	0°50'57
max. Earth dist.	-3364 May 21 j 20:38	2° 8 39'18	30.94220 AU	max. Earth dist.	-3356 Jun 09 j 04:29	20° 8 28'43	31.01622 AU
retrograde	-3364 Sep 04 j 00:56	5° 8 10'41		retrograde	-3356 Sep 21 j 18:40	22° 8 59'31	
opposition	-3364 Nov 20 j 09:18	3° 8 46'58	-1°-28'-58	opposition	-3356 Dec 07 j 20:18	21° 8 36'27	0°-52'-6
min. Earth dist.	-3364 Nov 20 j 15:39	3° 8 46'31	28.94816 AU	min. Earth dist.	-3356 Dec 08 j 10:12	21° 8 35'29	29.01980 AU
direct	-3363 Feb 07 j 08:31	2° 8 21'45		direct	-3355 Feb 25 j 12:19	20° 8 11'08	
conjunction	-3363 May 24 j 18:36	4° 8 53'44	-1°-21'-15	conjunction	-3355 Jun 12 j 09:00	22° 8 43'25	0°-46'-23
minimum elong	-3363 May 24 j 18:37	4° 8 53'44	1°21'13	minimum elong	-3355 Jun 12 j 09:00	22° 8 43'25	0°46'19
max. Earth dist.	-3363 May 24 j 11:01	4° 8 53'02	30.95297 AU	max. Earth dist.	-3355 Jun 11 j 16:06	22° 8 41'51	31.02288 AU
retrograde	-3363 Sep 06 j 10:45	7° 8 24'14		retrograde	-3355 Sep 24 j 05:27	25° 8 12'37	
opposition	-3363 Nov 22 j 19:33	6° 8 00'38	-1°-24'-45	opposition	-3355 Dec 10 j 06:30	23° 8 49'36	0°-47'-5
min. Earth dist.	-3363 Nov 23 j 03:05	6° 8 00'06	28.95916 AU	min. Earth dist.	-3355 Dec 10 j 20:56	23° 8 48'35	29.02673 AU
direct	-3362 Feb 09 j 20:27	4° 8 35'27		direct	-3354 Feb 28 j 00:03	22° 8 24'13	
conjunction	-3362 May 27 j 08:33	7° 8 07'30	-1°-17'-15	conjunction	-3354 Jun 14 j 22:25	24° 8 56'30	0°-41'-40
minimum elong	-3362 May 27 j 08:33	7° 8 07'30	1°17'11	minimum elong	-3354 Jun 14 j 22:25	24° 8 56'30	0°41'35
max. Earth dist.	-3362 May 26 j 22:54	7° 8 06'37	30.96425 AU	max. Earth dist.	-3354 Jun 14 j 05:59	24° 8 54'59	31.03008 AU
retrograde	-3362 Sep 08 j 23:03	9° 8 37'52		retrograde	-3354 Sep 26 j 14:47	27° 8 25'31	
opposition	-3362 Nov 25 j 05:50	8° 8 14'24	-1°-20'-24	opposition	-3354 Dec 12 j 16:54	26° 8 02'33	0°-42'-1
min. Earth dist.	-3362 Nov 25 j 13:37	8° 8 13'51	28.97035 AU	min. Earth dist.	-3354 Dec 13 j 08:14	26° 8 01'28	29.03427 AU
direct	-3361 Feb 12 j 07:37	6° 8 49'13		direct	-3353 Mar 02 j 12:52	24° 8 37'09	
conjunction	-3361 May 29 j 22:39	9° 8 21'22	-1°-13'-7	conjunction	-3353 Jun 17 j 11:29	27° 8 09'25	0°-36'-53
minimum elong	-3361 May 29 j 22:40	9° 8 21'22	1°13'04	minimum elong	-3353 Jun 17 j 11:29	27° 8 09'25	0°36'48
max. Earth dist.	-3361 May 29 j 12:47	9° 8 20'27	30.97516 AU	max. Earth dist.	-3353 Jun 16 j 17:27	27° 8 07'45	31.03820 AU
retrograde	-3361 Sep 11 j 08:59	11° 8 51'36		retrograde	-3353 Sep 29 j 02:25	29° 8 38'16	
opposition	-3361 Nov 27 j 16:17	10° 8 28'14	-1°-15'-56	opposition	-3353 Dec 15 j 03:11	28° 8 15'22	0°-36'-53

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Attention, astronomical year style is used: The year -3353 in astronomical counting style is the year 3354 BCE in historical counting style.

min. Earth dist.	-3353 Dec 15 j 18:11	28° 8 14'18	29.04298 AU	direct	-3345 Mar 20 j 13:35	12° II 18'43	
direct	-3352 Mar 04 j 00:09	26° 8 49'56					
max. Earth dist.	-3352 Jun 18 j 07:05	29° 8 20'35	31.04750 AU	conjunction	-3345 Jul 05 j 18:20	14° II 51'02	0°02'42
				minimum elong	-3345 Jul 05 j 18:21	14° II 51'02	0°02'49
conjunction	-3352 Jun 19 j 00:39	29° 8 22'13	0°-32'-4	behind sun begin	-3345 Jul 05 j 11:48	14° II 50'27	
minimum elong	-3352 Jun 19 j 00:39	29° 8 22'13	0°31'59	behind sun end	-3345 Jul 06 j 00:53	14° II 51'36	
	-3352 Jul 06 j 03:10	0° II		max. Earth dist.	-3345 Jul 04 j 20:11	14° II 48'58	31.11604 AU
retrograde	-3352 Sep 30 j 11:15	1° II 50'55		retrograde	-3345 Oct 16 j 14:05	17° II 18'49	
opposition	-3352 Dec 16 j 13:38	0° II 28'05	0°-31'-42	opposition	-3344 Jan 01 j 15:23	15° II 56'28	0°05'26
min. Earth dist.	-3352 Dec 17 j 05:57	0° II 26'56	29.05288 AU	min. Earth dist.	-3344 Jan 02 j 12:14	15° II 55'01	29.11957 AU
	-3351 Jan 02 j 12:35	30° R 8		direct	-3344 Mar 22 j 03:08	14° II 31'03	
direct	-3351 Mar 06 j 10:38	29° 8 02'40		max. Earth dist.	-3344 Jul 06 j 06:50	17° II 01'06	31.12252 AU
	-3351 May 06 j 14:12	0° II					
				conjunction	-3344 Jul 07 j 06:42	17° II 03'19	0°07'40
conjunction	-3351 Jun 21 j 13:29	1° II 34'57	0°-27'-11	minimum elong	-3344 Jul 07 j 06:41	17° II 03'19	0°07'47
minimum elong	-3351 Jun 21 j 13:30	1° II 34'57	0°27'06	behind sun begin	-3344 Jul 07 j 00:48	17° II 02'48	
max. Earth dist.	-3351 Jun 20 j 18:54	1° II 33'14	31.05804 AU	behind sun end	-3344 Jul 07 j 12:34	17° II 03'51	
retrograde	-3351 Oct 02 j 21:42	4° II 03'32		retrograde	-3344 Oct 18 j 01:36	19° II 30'58	
opposition	-3351 Dec 18 j 23:56	2° II 40'47	0°-26'-27	opposition	-3343 Jan 03 j 01:53	18° II 08'38	0°10'45
min. Earth dist.	-3351 Dec 19 j 15:46	2° II 39'41	29.06372 AU	min. Earth dist.	-3343 Jan 03 j 22:30	18° II 07'12	29.12585 AU
direct	-3350 Mar 08 j 23:34	1° II 15'23		direct	-3343 Mar 24 j 15:13	16° II 43'11	
max. Earth dist.	-3350 Jun 23 j 07:40	3° II 45'57	31.06911 AU				
				conjunction	-3343 Jul 09 j 18:58	19° II 15'24	0°12'37
conjunction	-3350 Jun 24 j 02:32	3° II 47'42	0°-22'-16	minimum elong	-3343 Jul 09 j 18:59	19° II 15'24	0°12'44
minimum elong	-3350 Jun 24 j 02:32	3° II 47'42	0°22'11	behind sun begin	-3343 Jul 09 j 14:55	19° II 15'03	
retrograde	-3350 Oct 05 j 07:40	6° II 16'09		behind sun end	-3343 Jul 09 j 23:02	19° II 15'46	
opposition	-3350 Dec 21 j 10:22	4° II 53'30	0°-21'-11	max. Earth dist.	-3343 Jul 08 j 19:37	19° II 13'14	31.12857 AU
min. Earth dist.	-3350 Dec 22 j 03:46	4° II 52'17	29.07494 AU	retrograde	-3343 Oct 20 j 09:58	21° II 42'55	
direct	-3349 Mar 11 j 10:11	3° II 28'07		opposition	-3342 Jan 05 j 12:35	20° II 20'36	0°16'02
				min. Earth dist.	-3342 Jan 06 j 10:36	20° II 19'04	29.13189 AU
conjunction	-3349 Jun 26 j 15:28	6° II 00'27	0°-17'-20	direct	-3342 Mar 27 j 02:47	18° II 55'07	
minimum elong	-3349 Jun 26 j 15:28	6° II 00'27	0°17'14	max. Earth dist.	-3342 Jul 11 j 06:47	21° II 25'03	31.13476 AU
max. Earth dist.	-3349 Jun 25 j 19:59	5° II 58'39	31.08031 AU				
retrograde	-3349 Oct 07 j 18:53	8° II 28'48		conjunction	-3342 Jul 12 j 07:02	21° II 27'18	0°17'33
opposition	-3349 Dec 23 j 20:52	7° II 06'14	0°-15'-53	minimum elong	-3342 Jul 12 j 07:02	21° II 27'18	0°17'40
min. Earth dist.	-3349 Dec 24 j 14:11	7° II 05'01	29.08583 AU	retrograde	-3342 Oct 22 j 19:41	23° II 54'40	
direct	-3348 Mar 12 j 23:16	5° II 40'52		opposition	-3341 Jan 07 j 23:05	22° II 32'23	0°21'18
max. Earth dist.	-3348 Jun 27 j 07:28	8° II 11'18	31.09081 AU	min. Earth dist.	-3341 Jan 08 j 20:21	22° II 30'54	29.13830 AU
				direct	-3341 Mar 29 j 15:31	21° II 06'52	
conjunction	-3348 Jun 28 j 04:11	8° II 13'13	0°-12'-22				
minimum elong	-3348 Jun 28 j 04:10	8° II 13'13	0°12'16	conjunction	-3341 Jul 14 j 19:03	23° II 39'01	0°22'27
behind sun begin	-3348 Jun 27 j 23:52	8° II 12'50		minimum elong	-3341 Jul 14 j 19:03	23° II 39'01	0°22'34
behind sun end	-3348 Jun 28 j 08:28	8° II 13'36		max. Earth dist.	-3341 Jul 13 j 19:01	23° II 36'47	31.14148 AU
retrograde	-3348 Oct 09 j 06:24	10° II 41'27		retrograde	-3341 Oct 25 j 05:00	26° II 06'17	
opposition	-3348 Dec 25 j 07:32	9° II 18'57	0°-10'-33	opposition	-3340 Jan 10 j 09:54	24° II 44'01	0°26'32
min. Earth dist.	-3348 Dec 26 j 02:06	9° II 17'39	29.09600 AU	min. Earth dist.	-3340 Jan 11 j 08:06	24° II 42'29	29.14565 AU
direct	-3347 Mar 15 j 11:12	7° II 53'35		direct	-3340 Mar 31 j 01:39	23° II 18'31	
				max. Earth dist.	-3340 Jul 15 j 06:47	25° II 48'23	31.14941 AU
conjunction	-3347 Jun 30 j 17:00	10° II 25'56	0°-7'-24				
minimum elong	-3347 Jun 30 j 17:01	10° II 25'56	0°07'18	conjunction	-3340 Jul 16 j 06:43	25° II 50'37	0°27'19
behind sun begin	-3347 Jun 30 j 11:01	10° II 25'24		minimum elong	-3340 Jul 16 j 06:43	25° II 50'37	0°27'26
behind sun end	-3347 Jun 30 j 23:01	10° II 26'28		retrograde	-3340 Oct 26 j 15:13	28° II 17'48	
max. Earth dist.	-3347 Jun 29 j 20:17	10° II 24'01	31.10041 AU	opposition	-3339 Jan 11 j 20:34	26° II 55'35	0°31'43
retrograde	-3347 Oct 11 j 17:21	12° II 54'01		min. Earth dist.	-3339 Jan 12 j 17:58	26° II 54'06	29.15411 AU
opposition	-3347 Dec 27 j 18:02	11° II 31'35	0°-5'-13	direct	-3339 Apr 02 j 14:10	25° II 30'06	
min. Earth dist.	-3347 Dec 28 j 13:15	11° II 30'14	29.10494 AU				
direct	-3346 Mar 18 j 01:38	10° II 06'13		conjunction	-3339 Jul 18 j 18:26	28° II 02'11	0°32'09
max. Earth dist.	-3346 Jul 02 j 07:09	12° II 36'28	31.10878 AU	minimum elong	-3339 Jul 18 j 18:26	28° II 02'11	0°32'16
				max. Earth dist.	-3339 Jul 17 j 18:00	27° II 59'55	31.15843 AU
conjunction	-3346 Jul 03 j 05:43	12° II 38'33	0°-2'-24		-3339 Sep 17 j 11:30	0° II	
minimum elong	-3346 Jul 03 j 05:42	12° II 38'33	0°02'19	retrograde	-3339 Oct 29 j 02:21	0° II 29'18	
behind sun begin	-3346 Jul 02 j 23:09	12° II 37'58			-3339 Dec 10 j 20:09	30° R II	
behind sun end	-3346 Jul 03 j 12:16	12° II 39'08		opposition	-3338 Jan 14 j 07:10	29° II 07'09	0°36'51
retrograde	-3346 Oct 14 j 04:33	15° II 06'30		min. Earth dist.	-3338 Jan 15 j 05:11	29° II 05'37	29.16377 AU
asc. node	-3346 Dec 23 j 04:40	13° II 55'48		direct	-3338 Apr 05 j 01:28	27° II 41'42	
opposition	-3346 Dec 30 j 04:40	13° II 44'06	0°00'06		-3338 Jul 15 j 01:56	0° II	
min. Earth dist.	-3346 Dec 31 j 00:25	13° II 42'44	29.11281 AU	max. Earth dist.	-3338 Jul 20 j 06:29	0° II 11'35	31.16849 AU

Attention, astronomical year style is used: The year -3338 in astronomical counting style is the year 3339 BCE in historical counting style.

conjunction	-3338 Jul 21 j 06:12	0°☾13'48	0°36'56	minimum elong	-3330 Aug 08 j 00:41	17°☾46'46	1°12'47
minimum elong	-3338 Jul 21 j 06:12	0°☾13'48	0°37'03	retrograde	-3330 Nov 17 j 22:05	20°☾13'16	
retrograde	-3338 Oct 31 j 13:08	2°☾40'50		opposition	-3329 Feb 03 j 10:38	18°☾51'26	1°19'46
opposition	-3337 Jan 16 j 18:00	1°☾18'46	0°41'56	min. Earth dist.	-3329 Feb 04 j 10:40	18°☾49'47	29.23254 AU
min. Earth dist.	-3337 Jan 17 j 16:04	1°☾17'15	29.17402 AU	direct	-3329 Apr 25 j 15:31	17°☾26'10	
	-3337 Mar 18 j 04:56	30°☾II		max. Earth dist.	-3329 Aug 09 j 10:27	19°☾55'26	31.23412 AU
direct	-3337 Apr 07 j 15:11	29°☾II53'23					
	-3337 Apr 27 j 20:44	0°☾		conjunction	-3329 Aug 10 j 11:23	19°☾57'46	1°16'43
				minimum elong	-3329 Aug 10 j 11:23	19°☾57'46	1°16'50
conjunction	-3337 Jul 23 j 17:40	2°☾25'29	0°41'40	retrograde	-3329 Nov 20 j 07:40	22°☾24'12	
minimum elong	-3337 Jul 23 j 17:39	2°☾25'29	0°41'47	opposition	-3328 Feb 05 j 21:58	21°☾02'20	1°24'02
max. Earth dist.	-3337 Jul 22 j 16:55	2°☾23'10	31.17885 AU	min. Earth dist.	-3328 Feb 06 j 21:39	21°☾00'43	29.23752 AU
retrograde	-3337 Nov 03 j 00:30	4°☾52'29		direct	-3328 Apr 27 j 04:36	19°☾37'04	
opposition	-3336 Jan 19 j 04:52	3°☾30'29	0°46'58				
min. Earth dist.	-3336 Jan 20 j 02:55	3°☾28'58	29.18448 AU	conjunction	-3328 Aug 11 j 21:58	22°☾08'35	1°20'39
direct	-3336 Apr 09 j 02:09	2°☾05'10		minimum elong	-3328 Aug 11 j 21:57	22°☾08'35	1°20'45
max. Earth dist.	-3336 Jul 24 j 05:25	4°☾35'01	31.18904 AU	max. Earth dist.	-3328 Aug 10 j 20:27	22°☾06'12	31.23945 AU
				retrograde	-3328 Nov 21 j 18:53	24°☾34'59	
conjunction	-3336 Jul 25 j 05:18	4°☾37'15	0°46'20	opposition	-3327 Feb 07 j 09:07	23°☾13'07	1°28'10
minimum elong	-3336 Jul 25 j 05:17	4°☾37'15	0°46'27	min. Earth dist.	-3327 Feb 08 j 08:10	23°☾11'32	29.24348 AU
retrograde	-3336 Nov 04 j 10:43	7°☾04'11		direct	-3327 Apr 29 j 15:22	21°☾47'52	
opposition	-3335 Jan 20 j 15:50	5°☾42'16	0°51'55	max. Earth dist.	-3327 Aug 13 j 08:34	24°☾17'05	31.24579 AU
min. Earth dist.	-3335 Jan 21 j 14:46	5°☾40'41	29.19438 AU				
direct	-3335 Apr 11 j 15:49	4°☾17'00		conjunction	-3327 Aug 14 j 08:37	24°☾19'20	1°24'28
				minimum elong	-3327 Aug 14 j 08:36	24°☾19'20	1°24'34
conjunction	-3335 Jul 27 j 16:42	6°☾49'03	0°50'56	retrograde	-3327 Nov 24 j 04:52	26°☾45'42	
minimum elong	-3335 Jul 27 j 16:42	6°☾49'03	0°51'04	opposition	-3326 Feb 09 j 20:32	25°☾23'52	1°32'11
max. Earth dist.	-3335 Jul 26 j 15:22	6°☾46'42	31.19849 AU	min. Earth dist.	-3326 Feb 10 j 19:47	25°☾22'16	29.25025 AU
retrograde	-3335 Nov 06 j 22:56	9°☾15'56		direct	-3326 May 02 j 05:01	23°☾58'40	
opposition	-3334 Jan 23 j 02:48	7°☾54'04	0°56'48				
min. Earth dist.	-3334 Jan 24 j 01:18	7°☾52'31	29.20336 AU	conjunction	-3326 Aug 16 j 19:00	26°☾30'04	1°28'09
direct	-3334 Apr 14 j 04:27	6°☾28'49		minimum elong	-3326 Aug 16 j 19:00	26°☾30'04	1°28'16
max. Earth dist.	-3334 Jul 29 j 03:25	8°☾58'32	31.20673 AU	max. Earth dist.	-3326 Aug 15 j 18:19	26°☾27'46	31.25300 AU
				retrograde	-3326 Nov 26 j 16:57	28°☾56'26	
conjunction	-3334 Jul 30 j 04:14	9°☾00'51	0°55'28	opposition	-3325 Feb 12 j 07:53	27°☾34'38	1°36'04
minimum elong	-3334 Jul 30 j 04:14	9°☾00'51	0°55'35	min. Earth dist.	-3325 Feb 13 j 05:56	27°☾33'08	29.25781 AU
retrograde	-3334 Nov 09 j 07:26	11°☾27'40		direct	-3325 May 04 j 17:20	26°☾09'31	
opposition	-3333 Jan 25 j 14:00	10°☾05'50	1°01'35	max. Earth dist.	-3325 Aug 18 j 06:02	28°☾38'41	31.26066 AU
min. Earth dist.	-3333 Jan 26 j 13:52	10°☾04'11	29.21105 AU				
direct	-3333 Apr 16 j 16:33	8°☾40'37		conjunction	-3325 Aug 19 j 05:32	28°☾40'53	1°31'43
				minimum elong	-3325 Aug 19 j 05:31	28°☾40'53	1°31'50
conjunction	-3333 Aug 01 j 15:34	11°☾12'34	0°59'54		-3325 Sep 25 j 07:54	0°☾	
minimum elong	-3333 Aug 01 j 15:33	11°☾12'34	1°00'01	retrograde	-3325 Nov 29 j 02:07	1°☾07'16	
max. Earth dist.	-3333 Jul 31 j 13:51	11°☾10'10	31.21385 AU		-3324 Feb 05 j 22:39	30°☾R☾	
retrograde	-3333 Nov 11 j 17:09	13°☾39'18		opposition	-3324 Feb 14 j 19:30	29°☾45'32	1°39'48
opposition	-3332 Jan 28 j 01:08	12°☾17'30	1°06'17	min. Earth dist.	-3324 Feb 15 j 18:22	29°☾43'58	29.26560 AU
min. Earth dist.	-3332 Jan 29 j 00:15	12°☾15'54	29.21758 AU	direct	-3324 May 06 j 05:04	28°☾20'29	
direct	-3332 Apr 18 j 05:08	10°☾52'17			-3324 Jul 28 j 02:52	0°☾	
max. Earth dist.	-3332 Aug 02 j 01:05	13°☾21'47	31.21973 AU				
				conjunction	-3324 Aug 20 j 15:45	0°☾51'49	1°35'09
conjunction	-3332 Aug 03 j 02:42	13°☾24'10	1°04'15	minimum elong	-3324 Aug 20 j 15:45	0°☾51'49	1°35'16
minimum elong	-3332 Aug 03 j 02:41	13°☾24'10	1°04'22	max. Earth dist.	-3324 Aug 19 j 16:02	0°☾49'35	31.26834 AU
retrograde	-3332 Nov 13 j 02:27	15°☾50'49		retrograde	-3324 Nov 30 j 12:23	3°☾18'13	
opposition	-3331 Jan 29 j 12:21	14°☾29'01	1°10'53	opposition	-3323 Feb 16 j 07:01	1°☾56'32	1°43'24
min. Earth dist.	-3331 Jan 30 j 12:36	14°☾27'21	29.22310 AU	min. Earth dist.	-3323 Feb 17 j 04:47	1°☾55'02	29.27299 AU
direct	-3331 Apr 20 j 15:23	13°☾03'47		direct	-3323 May 08 j 17:26	0°☾31'34	
				max. Earth dist.	-3323 Aug 22 j 02:46	3°☾00'40	31.27519 AU
conjunction	-3331 Aug 05 j 13:46	15°☾35'34	1°08'31				
minimum elong	-3331 Aug 05 j 13:45	15°☾35'34	1°08'38	conjunction	-3323 Aug 23 j 02:10	3°☾02'51	1°38'27
max. Earth dist.	-3331 Aug 04 j 12:08	15°☾33'11	31.22484 AU	minimum elong	-3323 Aug 23 j 02:10	3°☾02'51	1°38'33
retrograde	-3331 Nov 15 j 11:47	18°☾02'08		retrograde	-3323 Dec 02 j 22:19	5°☾29'17	
opposition	-3330 Jan 31 j 23:22	16°☾40'20	1°15'23	opposition	-3322 Feb 18 j 18:40	4°☾07'39	1°46'51
min. Earth dist.	-3330 Feb 01 j 23:00	16°☾38'42	29.22785 AU	min. Earth dist.	-3322 Feb 19 j 17:20	4°☾06'06	29.27946 AU
direct	-3330 Apr 23 j 04:26	15°☾15'04		direct	-3322 May 11 j 03:33	2°☾42'45	
max. Earth dist.	-3330 Aug 06 j 22:37	17°☾44'20	31.22938 AU				
				conjunction	-3322 Aug 25 j 12:33	5°☾13'59	1°41'37
conjunction	-3330 Aug 08 j 00:42	17°☾46'46	1°12'40	minimum elong	-3322 Aug 25 j 12:33	5°☾13'59	1°41'42

Planetary Phenomena of Neptune from -3400 through -2900 (UT), Astrodienst AG 7-Dez-2017 14:39, page 6

Attention, astronomical year style is used: The year -3322 in astronomical counting style is the year 3323 BCE in historical counting style.

max. Earth dist.	-3322 Aug 24 j 13:25	5°Ω11'49	31.28100 AU	max. Earth dist.	-3314 Sep 10 j 23:53	22°Ω38'59	31.29271 AU
retrograde	-3322 Dec 05 j 08:05	7°Ω40'27		retrograde	-3314 Dec 22 j 20:00	25°Ω07'29	
opposition	-3321 Feb 21 j 06:28	6°Ω18'50	1°50'08	opposition	-3313 Mar 11 j 06:00	23°Ω45'35	2°10'26
min. Earth dist.	-3321 Feb 22 j 04:21	6°Ω17'20	29.28454 AU	min. Earth dist.	-3313 Mar 12 j 01:04	23°Ω44'18	29.29546 AU
direct	-3321 May 13 j 16:22	4°Ω53'59		direct	-3313 May 31 j 16:31	22°Ω20'58	
				max. Earth dist.	-3313 Sep 13 j 10:27	24°Ω49'36	31.29522 AU
conjunction	-3321 Aug 27 j 22:43	7°Ω25'09	1°44'37				
minimum elong	-3321 Aug 27 j 22:42	7°Ω25'09	1°44'43	conjunction	-3313 Sep 14 j 05:04	24°Ω51'21	2°02'56
max. Earth dist.	-3321 Aug 26 j 23:05	7°Ω22'56	31.28528 AU	minimum elong	-3313 Sep 14 j 05:04	24°Ω51'21	2°03'01
retrograde	-3321 Dec 07 j 18:50	9°Ω51'39		retrograde	-3313 Dec 25 j 05:10	27°Ω18'03	
opposition	-3320 Feb 23 j 18:24	8°Ω30'02	1°53'17	opposition	-3312 Mar 12 j 18:07	25°Ω56'10	2°12'09
min. Earth dist.	-3320 Feb 24 j 16:37	8°Ω28'31	29.28824 AU	min. Earth dist.	-3312 Mar 13 j 11:45	25°Ω54'59	29.29807 AU
direct	-3320 May 15 j 02:45	7°Ω05'14		direct	-3312 Jun 02 j 05:07	24°Ω31'37	
max. Earth dist.	-3320 Aug 28 j 10:21	9°Ω34'12	31.28816 AU				
				conjunction	-3312 Sep 15 j 14:31	27°Ω01'55	2°04'28
conjunction	-3320 Aug 29 j 09:00	9°Ω36'19	1°47'29	minimum elong	-3312 Sep 15 j 14:31	27°Ω01'55	2°04'31
minimum elong	-3320 Aug 29 j 09:00	9°Ω36'19	1°47'34	max. Earth dist.	-3312 Sep 14 j 19:54	27°Ω00'10	31.29789 AU
retrograde	-3320 Dec 09 j 04:33	12°Ω02'50		retrograde	-3312 Dec 26 j 15:38	29°Ω28'43	
opposition	-3319 Feb 25 j 06:09	10°Ω41'11	1°56'15	opposition	-3311 Mar 15 j 06:13	28°Ω06'50	2°13'41
min. Earth dist.	-3319 Feb 26 j 04:18	10°Ω39'40	29.29036 AU	min. Earth dist.	-3311 Mar 15 j 23:42	28°Ω05'39	29.30078 AU
direct	-3319 May 17 j 14:57	9°Ω16'24		direct	-3311 Jun 04 j 14:49	26°Ω42'21	
				max. Earth dist.	-3311 Sep 17 j 06:59	29°Ω10'59	31.30034 AU
conjunction	-3319 Aug 31 j 19:05	11°Ω47'24	1°50'11				
minimum elong	-3319 Aug 31 j 19:04	11°Ω47'24	1°50'16	conjunction	-3311 Sep 18 j 00:06	29°Ω12'35	2°05'48
max. Earth dist.	-3319 Aug 30 j 19:35	11°Ω45'12	31.28962 AU	minimum elong	-3311 Sep 18 j 00:06	29°Ω12'35	2°05'53
retrograde	-3319 Dec 11 j 16:05	14°Ω13'56			-3311 Oct 09 j 08:19	0°൬	
opposition	-3318 Feb 27 j 18:01	12°Ω52'14	1°59'03	retrograde	-3311 Dec 29 j 01:20	1°൬39'28	
min. Earth dist.	-3318 Feb 28 j 15:40	12°Ω50'46	29.29134 AU	opposition	-3310 Mar 17 j 18:34	0°൬17'35	2°15'01
direct	-3318 May 20 j 01:45	11°Ω27'28		min. Earth dist.	-3310 Mar 18 j 11:35	0°൬16'25	29.30283 AU
max. Earth dist.	-3318 Sep 02 j 07:03	13°Ω56'18	31.29004 AU		-3310 Mar 28 j 15:59	30°RΩ	
				direct	-3310 Jun 07 j 02:27	28°Ω53'10	
conjunction	-3318 Sep 03 j 05:06	13°Ω58'22	1°52'43		-3310 Aug 12 j 06:10	0°൬	
minimum elong	-3318 Sep 03 j 05:05	13°Ω58'22	1°52'49				
	-3318 Oct 01 j 09:25	15°Ω		conjunction	-3310 Sep 20 j 09:26	1°൬23'19	2°06'58
retrograde	-3318 Dec 14 j 02:20	16°Ω24'54		minimum elong	-3310 Sep 20 j 09:26	1°൬23'19	2°07'01
opposition	-3317 Mar 02 j 06:02	15°Ω03'09	2°01'41	max. Earth dist.	-3310 Sep 19 j 15:53	1°൬21'40	31.30195 AU
min. Earth dist.	-3317 Mar 03 j 03:54	15°Ω01'40	29.29144 AU	retrograde	-3310 Dec 31 j 13:25	3°൬50'18	
	-3317 Mar 04 j 04:26	15°RΩ		opposition	-3309 Mar 20 j 07:01	2°൬28'23	2°16'10
direct	-3317 May 22 j 15:46	13°Ω38'24		min. Earth dist.	-3309 Mar 20 j 23:11	2°൬27'18	29.30399 AU
	-3317 Aug 04 j 16:51	15°Ω		direct	-3309 Jun 09 j 12:57	1°൬04'03	
conjunction	-3317 Sep 05 j 14:49	16°Ω09'10	1°55'06				
minimum elong	-3317 Sep 05 j 14:49	16°Ω09'10	1°55'12	conjunction	-3309 Sep 22 j 19:02	3°൬34'07	2°07'57
max. Earth dist.	-3317 Sep 04 j 16:20	16°Ω07'03	31.29005 AU	minimum elong	-3309 Sep 22 j 19:02	3°൬34'07	2°08'01
retrograde	-3317 Dec 16 j 14:27	18°Ω35'42		max. Earth dist.	-3309 Sep 22 j 02:59	3°൬32'36	31.30241 AU
opposition	-3316 Mar 03 j 17:54	17°Ω13'54	2°04'08	retrograde	-3308 Jan 03 j 00:01	6°൬01'11	
min. Earth dist.	-3316 Mar 04 j 14:18	17°Ω12'31	29.29154 AU	opposition	-3308 Mar 21 j 19:32	4°൬39'14	2°17'07
direct	-3316 May 24 j 04:10	15°Ω49'09		min. Earth dist.	-3308 Mar 22 j 11:54	4°൬38'08	29.30380 AU
max. Earth dist.	-3316 Sep 06 j 03:28	18°Ω17'50	31.29018 AU	direct	-3308 Jun 11 j 01:30	3°൬14'57	
				max. Earth dist.	-3308 Sep 23 j 11:49	5°൬43'22	31.30155 AU
conjunction	-3316 Sep 07 j 00:30	18°Ω19'49	1°57'19				
minimum elong	-3316 Sep 07 j 00:30	18°Ω19'49	1°57'23	conjunction	-3308 Sep 24 j 04:23	5°൬44'55	2°08'45
retrograde	-3316 Dec 17 j 23:25	20°Ω46'22		minimum elong	-3308 Sep 24 j 04:23	5°൬44'55	2°08'48
opposition	-3315 Mar 06 j 05:58	19°Ω24'31	2°06'25	retrograde	-3307 Jan 04 j 12:29	8°൬12'04	
min. Earth dist.	-3315 Mar 07 j 02:43	19°Ω23'07	29.29203 AU	opposition	-3307 Mar 24 j 07:57	6°൬50'04	2°17'53
direct	-3315 May 26 j 16:15	17°Ω59'47		min. Earth dist.	-3307 Mar 24 j 22:57	6°൬49'04	29.30219 AU
				direct	-3307 Jun 13 j 13:09	5°൬25'49	
conjunction	-3315 Sep 09 j 10:04	20°Ω30'21	1°59'22				
minimum elong	-3315 Sep 09 j 10:04	20°Ω30'21	1°59'26	conjunction	-3307 Sep 26 j 13:51	7°൬55'42	2°09'22
max. Earth dist.	-3315 Sep 08 j 13:23	20°Ω28'24	31.29106 AU	minimum elong	-3307 Sep 26 j 13:51	7°൬55'42	2°09'25
retrograde	-3315 Dec 20 j 09:36	22°Ω56'56		max. Earth dist.	-3307 Sep 25 j 22:22	7°൬54'14	31.29914 AU
opposition	-3314 Mar 08 j 17:48	21°Ω35'03	2°08'31	retrograde	-3306 Jan 06 j 22:22	10°൬22'55	
min. Earth dist.	-3314 Mar 09 j 12:46	21°Ω33'46	29.29329 AU	opposition	-3306 Mar 26 j 20:32	9°൬00'52	2°18'27
direct	-3314 May 29 j 05:30	20°Ω10'22		min. Earth dist.	-3306 Mar 27 j 12:06	8°൬59'49	29.29915 AU
				direct	-3306 Jun 16 j 01:16	7°൬36'38	
conjunction	-3314 Sep 11 j 19:40	22°Ω40'50	2°01'14				
minimum elong	-3314 Sep 11 j 19:40	22°Ω40'50	2°01'18	conjunction	-3306 Sep 28 j 23:10	10°൬06'24	2°09'48
				minimum elong	-3306 Sep 28 j 23:10	10°൬06'24	2°09'50

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Attention, astronomical year style is used: The year -3306 in astronomical counting style is the year 3307 BCE in historical counting style.

max. Earth dist.	-3306 Sep 28 j 08:02	10° \mathring{M} 04'58	31.29565 AU	min. Earth dist.	-3297 Apr 16 j 21:33	28° \mathring{M} 36'17	29.27593 AU
retrograde	-3305 Jan 09 j 09:23	12° \mathring{M} 33'41		direct	-3297 Jul 06 j 07:32	27° \mathring{M} 13'04	
opposition	-3305 Mar 29 j 09:04	11° \mathring{M} 11'33	2°18'49				
min. Earth dist.	-3305 Mar 29 j 22:57	11° \mathring{M} 10'37	29.29515 AU	conjunction	-3297 Oct 18 j 08:30	29° \mathring{M} 42'01	2°05'22
direct	-3305 Jun 18 j 14:50	9° \mathring{M} 47'20		minimum elong	-3297 Oct 18 j 08:30	29° \mathring{M} 42'01	2°05'22
				max. Earth dist.	-3297 Oct 18 j 02:02	29° \mathring{M} 41'25	31.27340 AU
conjunction	-3305 Oct 01 j 08:17	12° \mathring{M} 16'59	2°10'03		-3297 Oct 26 j 06:46	0° \mathring{M}	
minimum elong	-3305 Oct 01 j 08:17	12° \mathring{M} 16'59	2°10'05	retrograde	-3296 Jan 29 j 12:32	2° \mathring{M} 10'27	
max. Earth dist.	-3305 Sep 30 j 17:53	12° \mathring{M} 15'37	31.29134 AU	opposition	-3296 Apr 18 j 03:13	0° \mathring{M} 47'56	2°13'12
retrograde	-3304 Jan 11 j 20:06	14° \mathring{M} 44'21		min. Earth dist.	-3296 Apr 18 j 08:44	0° \mathring{M} 47'33	29.27341 AU
opposition	-3304 Mar 30 j 21:42	13° \mathring{M} 22'08	2°18'59		-3296 May 19 j 16:04	30° \mathring{R} \mathring{M}	
min. Earth dist.	-3304 Mar 31 j 11:42	13° \mathring{M} 21'11	29.29079 AU	direct	-3296 Jul 07 j 20:54	29° \mathring{M} 24'18	
direct	-3304 Jun 20 j 02:27	11° \mathring{M} 57'57			-3296 Aug 23 j 23:28	0° \mathring{M}	
conjunction	-3304 Oct 02 j 17:26	14° \mathring{M} 27'27	2°10'07	conjunction	-3296 Oct 19 j 17:42	1° \mathring{M} 53'11	2°03'57
minimum elong	-3304 Oct 02 j 17:26	14° \mathring{M} 27'28	2°10'08	minimum elong	-3296 Oct 19 j 17:43	1° \mathring{M} 53'11	2°03'56
max. Earth dist.	-3304 Oct 02 j 04:24	14° \mathring{M} 26'14	31.28704 AU	max. Earth dist.	-3296 Oct 19 j 11:36	1° \mathring{M} 52'36	31.27022 AU
retrograde	-3303 Jan 13 j 05:04	16° \mathring{M} 54'54		retrograde	-3295 Jan 31 j 00:37	4° \mathring{M} 21'44	
opposition	-3303 Apr 02 j 10:02	15° \mathring{M} 32'37	2°18'57	opposition	-3295 Apr 20 j 16:09	2° \mathring{M} 59'10	2°11'36
min. Earth dist.	-3303 Apr 02 j 22:23	15° \mathring{M} 31'47	29.28660 AU	min. Earth dist.	-3295 Apr 20 j 21:59	2° \mathring{M} 58'46	29.26958 AU
direct	-3303 Jun 22 j 15:19	14° \mathring{M} 08'27		direct	-3295 Jul 10 j 08:20	1° \mathring{M} 35'35	
conjunction	-3303 Oct 05 j 02:28	16° \mathring{M} 37'52	2°10'00	conjunction	-3295 Oct 22 j 02:59	4° \mathring{M} 04'22	2°02'22
minimum elong	-3303 Oct 05 j 02:28	16° \mathring{M} 37'52	2°10'01	minimum elong	-3295 Oct 22 j 02:59	4° \mathring{M} 04'22	2°02'22
max. Earth dist.	-3303 Oct 04 j 13:39	16° \mathring{M} 36'39	31.28318 AU	max. Earth dist.	-3295 Oct 21 j 22:03	4° \mathring{M} 03'54	31.26574 AU
retrograde	-3302 Jan 15 j 15:29	19° \mathring{M} 05'25		retrograde	-3294 Feb 02 j 10:17	6° \mathring{M} 33'03	
opposition	-3302 Apr 04 j 22:40	17° \mathring{M} 43'04	2°18'44	opposition	-3294 Apr 23 j 05:11	5° \mathring{M} 10'24	2°09'48
min. Earth dist.	-3302 Apr 05 j 10:17	17° \mathring{M} 42'17	29.28329 AU	min. Earth dist.	-3294 Apr 23 j 09:35	5° \mathring{M} 10'07	29.26424 AU
direct	-3302 Jun 25 j 01:21	16° \mathring{M} 18'56		direct	-3294 Jul 12 j 21:26	3° \mathring{M} 46'52	
conjunction	-3302 Oct 07 j 11:28	18° \mathring{M} 48'15	2°09'41	conjunction	-3294 Oct 24 j 12:01	6° \mathring{M} 15'32	2°00'36
minimum elong	-3302 Oct 07 j 11:28	18° \mathring{M} 48'15	2°09'42	minimum elong	-3294 Oct 24 j 12:01	6° \mathring{M} 15'32	2°00'35
max. Earth dist.	-3302 Oct 07 j 00:48	18° \mathring{M} 47'15	31.28036 AU	max. Earth dist.	-3294 Oct 24 j 06:54	6° \mathring{M} 15'03	31.25979 AU
retrograde	-3301 Jan 18 j 01:00	21° \mathring{M} 15'56		retrograde	-3293 Feb 04 j 21:22	8° \mathring{M} 44'19	
opposition	-3301 Apr 07 j 11:21	19° \mathring{M} 53'32	2°18'18	opposition	-3293 Apr 25 j 18:20	7° \mathring{M} 21'35	2°07'49
min. Earth dist.	-3301 Apr 07 j 21:48	19° \mathring{M} 52'50	29.28088 AU	min. Earth dist.	-3293 Apr 25 j 22:23	7° \mathring{M} 21'19	29.25772 AU
direct	-3301 Jun 27 j 12:46	18° \mathring{M} 29'29		direct	-3293 Jul 15 j 08:40	5° \mathring{M} 58'04	
conjunction	-3301 Oct 09 j 20:25	20° \mathring{M} 58'43	2°09'12	conjunction	-3293 Oct 26 j 21:15	8° \mathring{M} 26'36	1°58'40
minimum elong	-3301 Oct 09 j 20:25	20° \mathring{M} 58'43	2°09'14	minimum elong	-3293 Oct 26 j 21:16	8° \mathring{M} 26'36	1°58'40
max. Earth dist.	-3301 Oct 09 j 09:50	20° \mathring{M} 57'43	31.27853 AU	max. Earth dist.	-3293 Oct 26 j 17:59	8° \mathring{M} 26'18	31.25280 AU
retrograde	-3300 Jan 20 j 13:12	23° \mathring{M} 26'32		retrograde	-3292 Feb 07 j 07:03	10° \mathring{M} 55'30	
opposition	-3300 Apr 08 j 23:52	22° \mathring{M} 04'07	2°17'41	opposition	-3292 Apr 27 j 07:15	9° \mathring{M} 32'40	2°05'40
min. Earth dist.	-3300 Apr 09 j 08:56	22° \mathring{M} 03'30	29.27950 AU	min. Earth dist.	-3292 Apr 27 j 10:29	9° \mathring{M} 32'26	29.25027 AU
direct	-3300 Jun 28 j 22:38	20° \mathring{M} 40'09		direct	-3292 Jul 16 j 21:12	8° \mathring{M} 09'08	
conjunction	-3300 Oct 11 j 05:27	23° \mathring{M} 09'18	2°08'31	conjunction	-3292 Oct 28 j 06:14	10° \mathring{M} 37'33	1°56'33
minimum elong	-3300 Oct 11 j 05:28	23° \mathring{M} 09'18	2°08'32	minimum elong	-3292 Oct 28 j 06:14	10° \mathring{M} 37'33	1°56'32
max. Earth dist.	-3300 Oct 10 j 20:53	23° \mathring{M} 08'30	31.27740 AU	max. Earth dist.	-3292 Oct 28 j 02:53	10° \mathring{M} 37'14	31.24526 AU
retrograde	-3299 Jan 22 j 00:06	25° \mathring{M} 37'17		retrograde	-3291 Feb 08 j 18:47	13° \mathring{M} 06'33	
opposition	-3299 Apr 11 j 12:37	24° \mathring{M} 14'50	2°16'51	opposition	-3291 Apr 29 j 20:13	11° \mathring{M} 43'36	2°03'20
min. Earth dist.	-3299 Apr 11 j 21:21	24° \mathring{M} 14'15	29.27847 AU	min. Earth dist.	-3291 Apr 29 j 22:08	11° \mathring{M} 43'28	29.24270 AU
direct	-3299 Jul 01 j 09:58	22° \mathring{M} 50'58		direct	-3291 Jul 19 j 07:42	10° \mathring{M} 20'05	
conjunction	-3299 Oct 13 j 14:21	25° \mathring{M} 20'03	2°07'39	conjunction	-3291 Oct 30 j 15:15	12° \mathring{M} 48'23	1°54'17
minimum elong	-3299 Oct 13 j 14:21	25° \mathring{M} 20'03	2°07'40	minimum elong	-3291 Oct 30 j 15:15	12° \mathring{M} 48'23	1°54'16
max. Earth dist.	-3299 Oct 13 j 05:53	25° \mathring{M} 19'15	31.27652 AU	max. Earth dist.	-3291 Oct 30 j 13:56	12° \mathring{M} 48'15	31.23777 AU
retrograde	-3298 Jan 24 j 12:55	27° \mathring{M} 48'11		retrograde	-3290 Feb 11 j 04:50	15° \mathring{M} 17'30	
opposition	-3298 Apr 14 j 01:19	26° \mathring{M} 25'43	2°15'50	opposition	-3290 May 02 j 09:17	13° \mathring{M} 54'28	2°00'49
min. Earth dist.	-3298 Apr 14 j 08:15	26° \mathring{M} 25'15	29.27746 AU	min. Earth dist.	-3290 May 02 j 10:38	13° \mathring{M} 54'22	29.23545 AU
direct	-3298 Jul 03 j 20:08	25° \mathring{M} 01'56		direct	-3290 Jul 21 j 19:01	12° \mathring{M} 30'58	
conjunction	-3298 Oct 15 j 23:28	27° \mathring{M} 30'58	2°06'36	conjunction	-3290 Nov 02 j 00:13	14° \mathring{M} 59'09	1°51'51
minimum elong	-3298 Oct 15 j 23:29	27° \mathring{M} 30'58	2°06'36	minimum elong	-3290 Nov 02 j 00:14	14° \mathring{M} 59'09	1°51'49
max. Earth dist.	-3298 Oct 15 j 16:21	27° \mathring{M} 30'18	31.27528 AU	max. Earth dist.	-3290 Nov 01 j 23:21	14° \mathring{M} 59'04	31.23106 AU
retrograde	-3297 Jan 27 j 00:01	29° \mathring{M} 59'15		retrograde	-3289 Feb 13 j 17:26	17° \mathring{M} 28'25	
opposition	-3297 Apr 16 j 14:20	28° \mathring{M} 36'46	2°14'37	opposition	-3289 May 04 j 22:14	16° \mathring{M} 05'18	1°58'08

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Attention, astronomical year style is used: The year -3289 in astronomical counting style is the year 3290 BCE in historical counting style.

min. Earth dist.	-3289 May 04 j 21:24	16° $\underline{\Delta}$ 05'21	29.22916 AU	min. Earth dist.	-3281 May 23 j 00:37	3° \mathbb{M} 37'42	29.18063 AU
direct	-3289 Jul 24 j 05:01	14° $\underline{\Delta}$ 41'50		direct	-3281 Aug 11 j 00:29	2° \mathbb{M} 14'18	
conjunction	-3289 Nov 04 j 09:15	17° $\underline{\Delta}$ 09'57	1°49'15	conjunction	-3281 Nov 21 j 11:48	4° \mathbb{M} 41'59	1°23'02
minimum elong	-3289 Nov 04 j 09:15	17° $\underline{\Delta}$ 09'57	1°49'14	minimum elong	-3281 Nov 21 j 11:48	4° \mathbb{M} 41'59	1°22'58
max. Earth dist.	-3289 Nov 04 j 09:54	17° $\underline{\Delta}$ 10'01	31.22520 AU	max. Earth dist.	-3281 Nov 21 j 18:39	4° \mathbb{M} 42'38	31.17491 AU
retrograde	-3288 Feb 16 j 04:52	19° $\underline{\Delta}$ 39'23		retrograde	-3280 Mar 05 j 04:18	7° \mathbb{M} 12'47	
opposition	-3288 May 06 j 11:19	18° $\underline{\Delta}$ 16'12	1°55'16	opposition	-3280 May 24 j 20:26	5° \mathbb{M} 49'12	1°26'38
min. Earth dist.	-3288 May 06 j 10:22	18° $\underline{\Delta}$ 16'16	29.22370 AU	min. Earth dist.	-3280 May 24 j 12:09	5° \mathbb{M} 49'45	29.17017 AU
direct	-3288 Jul 25 j 16:02	16° $\underline{\Delta}$ 52'49		direct	-3280 Aug 12 j 10:35	4° \mathbb{M} 26'14	
conjunction	-3288 Nov 05 j 18:20	19° $\underline{\Delta}$ 20'51	1°46'30	conjunction	-3280 Nov 22 j 21:18	6° \mathbb{M} 53'51	1°19'09
minimum elong	-3288 Nov 05 j 18:21	19° $\underline{\Delta}$ 20'51	1°46'27	minimum elong	-3280 Nov 22 j 21:19	6° \mathbb{M} 53'51	1°19'04
max. Earth dist.	-3288 Nov 05 j 20:08	19° $\underline{\Delta}$ 21'01	31.22023 AU	max. Earth dist.	-3280 Nov 23 j 05:09	6° \mathbb{M} 54'35	31.16402 AU
retrograde	-3287 Feb 17 j 17:47	21° $\underline{\Delta}$ 50'26		retrograde	-3279 Mar 07 j 15:45	9° \mathbb{M} 24'46	
opposition	-3287 May 09 j 00:07	20° $\underline{\Delta}$ 27'13	1°52'14	opposition	-3279 May 27 j 09:34	8° \mathbb{M} 01'04	1°22'26
min. Earth dist.	-3287 May 08 j 21:07	20° $\underline{\Delta}$ 27'26	29.21889 AU	min. Earth dist.	-3279 May 27 j 01:30	8° \mathbb{M} 01'37	29.15907 AU
direct	-3287 Jul 28 j 04:19	19° $\underline{\Delta}$ 03'55		direct	-3279 Aug 14 j 21:53	6° \mathbb{M} 38'06	
conjunction	-3287 Nov 08 j 03:26	21° $\underline{\Delta}$ 31'55	1°43'35	conjunction	-3279 Nov 25 j 06:49	9° \mathbb{M} 05'37	1°15'10
minimum elong	-3287 Nov 08 j 03:27	21° $\underline{\Delta}$ 31'55	1°43'33	minimum elong	-3279 Nov 25 j 06:50	9° \mathbb{M} 05'37	1°15'06
max. Earth dist.	-3287 Nov 08 j 05:54	21° $\underline{\Delta}$ 32'09	31.21565 AU	max. Earth dist.	-3279 Nov 25 j 15:51	9° \mathbb{M} 06'28	31.15306 AU
retrograde	-3286 Feb 20 j 06:38	24° $\underline{\Delta}$ 01'41		retrograde	-3278 Mar 10 j 05:00	11° \mathbb{M} 36'39	
opposition	-3286 May 11 j 13:20	22° $\underline{\Delta}$ 38'27	1°49'02	opposition	-3278 May 29 j 22:38	10° \mathbb{M} 12'51	1°18'07
min. Earth dist.	-3286 May 11 j 10:16	22° $\underline{\Delta}$ 38'39	29.21442 AU	min. Earth dist.	-3278 May 29 j 12:32	10° \mathbb{M} 13'32	29.14817 AU
direct	-3286 Jul 30 j 14:56	21° $\underline{\Delta}$ 15'13		direct	-3278 Aug 17 j 09:56	8° \mathbb{M} 49'52	
conjunction	-3286 Nov 10 j 12:37	23° $\underline{\Delta}$ 43'11	1°40'30	conjunction	-3278 Nov 27 j 16:12	11° \mathbb{M} 17'19	1°11'04
minimum elong	-3286 Nov 10 j 12:37	23° $\underline{\Delta}$ 43'11	1°40'27	minimum elong	-3278 Nov 27 j 16:13	11° \mathbb{M} 17'19	1°10'59
max. Earth dist.	-3286 Nov 10 j 16:46	23° $\underline{\Delta}$ 43'35	31.21123 AU	max. Earth dist.	-3278 Nov 28 j 01:49	11° \mathbb{M} 18'14	31.14245 AU
retrograde	-3285 Feb 22 j 17:30	26° $\underline{\Delta}$ 13'09		retrograde	-3277 Mar 12 j 17:45	13° \mathbb{M} 48'30	
opposition	-3285 May 14 j 02:27	24° $\underline{\Delta}$ 49'53	1°45'40	opposition	-3277 Jun 01 j 11:50	12° \mathbb{M} 24'34	1°13'41
min. Earth dist.	-3285 May 13 j 21:44	24° $\underline{\Delta}$ 50'12	29.20970 AU	min. Earth dist.	-3277 Jun 01 j 01:36	12° \mathbb{M} 25'16	29.13802 AU
direct	-3285 Aug 02 j 03:32	23° $\underline{\Delta}$ 26'44		direct	-3277 Aug 19 j 20:05	11° \mathbb{M} 01'35	
conjunction	-3285 Nov 12 j 21:51	25° $\underline{\Delta}$ 54'40	1°37'17	conjunction	-3277 Nov 30 j 01:53	13° \mathbb{M} 28'59	1°06'52
minimum elong	-3285 Nov 12 j 21:52	25° $\underline{\Delta}$ 54'40	1°37'15	minimum elong	-3277 Nov 30 j 01:54	13° \mathbb{M} 28'59	1°06'48
max. Earth dist.	-3285 Nov 13 j 01:51	25° $\underline{\Delta}$ 55'03	31.20630 AU	max. Earth dist.	-3277 Nov 30 j 13:20	13° \mathbb{M} 30'04	31.13281 AU
retrograde	-3284 Feb 25 j 05:54	28° $\underline{\Delta}$ 24'48			-3276 Jan 11 j 23:40	15° \mathbb{M}	
opposition	-3284 May 15 j 15:32	27° $\underline{\Delta}$ 01'31	1°42'09	retrograde	-3276 Mar 14 j 05:13	16° \mathbb{M} 00'17	
min. Earth dist.	-3284 May 15 j 10:31	27° $\underline{\Delta}$ 01'51	29.20442 AU		-3276 May 19 j 06:17	15° \mathbb{R} \mathbb{M}	
direct	-3284 Aug 03 j 14:21	25° $\underline{\Delta}$ 38'27		opposition	-3276 Jun 03 j 00:38	14° \mathbb{M} 36'18	1°09'08
conjunction	-3284 Nov 14 j 07:23	28° $\underline{\Delta}$ 06'21	1°33'55	min. Earth dist.	-3276 Jun 02 j 12:35	14° \mathbb{M} 37'07	29.12877 AU
minimum elong	-3284 Nov 14 j 07:23	28° $\underline{\Delta}$ 06'21	1°33'52	direct	-3276 Aug 21 j 08:56	13° \mathbb{M} 13'20	
max. Earth dist.	-3284 Nov 14 j 13:05	28° $\underline{\Delta}$ 06'53	31.20048 AU		-3276 Nov 13 j 09:04	15° \mathbb{M}	
retrograde	-3283 Jan 09 j 23:12	0° \mathbb{M}		conjunction	-3276 Dec 01 j 11:25	15° \mathbb{M} 40'41	1°02'34
	-3283 Feb 26 j 16:49	0° \mathbb{M} 36'40		minimum elong	-3276 Dec 01 j 11:26	15° \mathbb{M} 40'41	1°02'29
	-3283 Apr 17 j 14:44	30° \mathbb{R} $\underline{\Delta}$		max. Earth dist.	-3276 Dec 01 j 22:53	15° \mathbb{M} 41'46	31.12412 AU
opposition	-3283 May 18 j 04:44	29° $\underline{\Delta}$ 13'20	1°38'29	retrograde	-3275 Mar 16 j 18:51	18° \mathbb{M} 12'08	
min. Earth dist.	-3283 May 17 j 23:03	29° $\underline{\Delta}$ 13'43	29.19787 AU	opposition	-3275 Jun 05 j 13:42	16° \mathbb{M} 48'05	1°04'29
direct	-3283 Aug 06 j 02:48	27° $\underline{\Delta}$ 50'20		min. Earth dist.	-3275 Jun 05 j 01:02	16° \mathbb{M} 48'56	29.12058 AU
	-3283 Nov 08 j 16:48	0° \mathbb{M}		direct	-3275 Aug 23 j 20:06	15° \mathbb{M} 25'09	
conjunction	-3283 Nov 16 j 16:41	0° \mathbb{M} 18'10	1°30'25	conjunction	-3275 Dec 03 j 21:03	17° \mathbb{M} 52'28	0°58'10
minimum elong	-3283 Nov 16 j 16:42	0° \mathbb{M} 18'10	1°30'22	minimum elong	-3275 Dec 03 j 21:04	17° \mathbb{M} 52'28	0°58'06
max. Earth dist.	-3283 Nov 16 j 22:04	0° \mathbb{M} 18'40	31.19335 AU	max. Earth dist.	-3275 Dec 04 j 10:40	17° \mathbb{M} 53'46	31.11634 AU
retrograde	-3282 Mar 01 j 05:07	2° \mathbb{M} 48'40		retrograde	-3274 Mar 19 j 06:04	20° \mathbb{M} 24'05	
opposition	-3282 May 20 j 18:01	1° \mathbb{M} 25'16	1°34'40	opposition	-3274 Jun 08 j 02:47	18° \mathbb{M} 59'59	0°59'44
min. Earth dist.	-3282 May 20 j 11:22	1° \mathbb{M} 25'43	29.19000 AU	min. Earth dist.	-3274 Jun 07 j 13:02	19° \mathbb{M} 00'55	29.11304 AU
direct	-3282 Aug 08 j 13:17	0° \mathbb{M} 02'18		direct	-3274 Aug 26 j 08:36	17° \mathbb{M} 37'06	
conjunction	-3282 Nov 19 j 02:19	2° \mathbb{M} 30'04	1°26'47	conjunction	-3274 Dec 06 j 06:46	20° \mathbb{M} 04'23	0°53'41
minimum elong	-3282 Nov 19 j 02:19	2° \mathbb{M} 30'04	1°26'43	minimum elong	-3274 Dec 06 j 06:46	20° \mathbb{M} 04'23	0°53'36
max. Earth dist.	-3282 Nov 19 j 09:08	2° \mathbb{M} 30'43	31.18474 AU	max. Earth dist.	-3274 Dec 06 j 20:22	20° \mathbb{M} 05'40	31.10919 AU
retrograde	-3281 Mar 03 j 15:29	5° \mathbb{M} 00'44		retrograde	-3273 Mar 21 j 18:44	22° \mathbb{M} 36'11	
opposition	-3281 May 23 j 07:19	3° \mathbb{M} 37'15	1°30'43	opposition	-3273 Jun 10 j 15:47	21° \mathbb{M} 12'01	0°54'53

Attention, astronomical year style is used: The year -3273 in astronomical counting style is the year 3274 BCE in historical counting style.

min. Earth dist.	-3273 Jun 10 j 00:59	21° ℳ 13'02	29.10606 AU	retrograde	-3265 Apr 08 j 23:41	10° ♂ 16'51	
direct	-3273 Aug 28 j 18:49	19° ℳ 49'11		opposition	-3265 Jun 28 j 23:32	8° ♂ 52'09	0°13'46
				min. Earth dist.	-3265 Jun 28 j 04:29	8° ♂ 53'27	29.02828 AU
conjunction	-3273 Dec 08 j 16:42	22° ℳ 16'28	0°49'07	direct	-3265 Sep 15 j 13:11	7° ♂ 29'19	
minimum elong	-3273 Dec 08 j 16:42	22° ℳ 16'28	0°49'01				
max. Earth dist.	-3273 Dec 09 j 07:52	22° ℳ 17'54	31.10217 AU	conjunction	-3265 Dec 26 j 03:05	9° ♂ 56'29	0°10'30
retrograde	-3272 Mar 23 j 05:25	24° ℳ 48'26		minimum elong	-3265 Dec 26 j 03:05	9° ♂ 56'29	0°10'24
opposition	-3272 Jun 12 j 04:51	23° ℳ 24'14	0°49'57	behind sun begin	-3265 Dec 25 j 21:59	9° ♂ 56'01	
min. Earth dist.	-3272 Jun 11 j 13:59	23° ℳ 25'15	29.09889 AU	behind sun end	-3265 Dec 26 j 08:10	9° ♂ 56'57	
direct	-3272 Aug 30 j 06:10	22° ℳ 01'27		max. Earth dist.	-3265 Dec 26 j 22:23	9° ♂ 58'18	31.02311 AU
				retrograde	-3264 Apr 10 j 12:49	12° ♂ 29'32	
conjunction	-3272 Dec 10 j 02:40	24° ℳ 28'43	0°44'28	opposition	-3264 Jun 30 j 12:17	11° ♂ 04'45	0°08'27
minimum elong	-3272 Dec 10 j 02:40	24° ℳ 28'43	0°44'21	min. Earth dist.	-3264 Jun 29 j 16:15	11° ♂ 06'08	29.01862 AU
max. Earth dist.	-3272 Dec 10 j 17:58	24° ℳ 30'10	31.09489 AU	direct	-3264 Sep 16 j 23:49	9° ♂ 41'55	
retrograde	-3271 Mar 25 j 18:56	27° ℳ 00'51					
opposition	-3271 Jun 14 j 17:49	25° ℳ 36'37	0°44'57	conjunction	-3264 Dec 27 j 13:36	12° ♂ 09'06	0°05'33
min. Earth dist.	-3271 Jun 14 j 01:30	25° ℳ 37'43	29.09124 AU	minimum elong	-3264 Dec 27 j 13:36	12° ♂ 09'06	0°05'26
direct	-3271 Sep 01 j 16:26	24° ℳ 13'51		behind sun begin	-3264 Dec 27 j 07:23	12° ♂ 08'32	
				behind sun end	-3264 Dec 27 j 19:49	12° ♂ 09'39	
conjunction	-3271 Dec 12 j 12:51	26° ℳ 41'07	0°39'45	max. Earth dist.	-3264 Dec 28 j 10:29	12° ♂ 11'04	31.01390 AU
minimum elong	-3271 Dec 12 j 12:51	26° ℳ 41'07	0°39'39	retrograde	-3263 Apr 12 j 23:51	14° ♂ 42'16	
max. Earth dist.	-3271 Dec 13 j 04:48	26° ℳ 42'38	31.08676 AU	min. Earth dist.	-3263 Jul 02 j 04:43	13° ♂ 18'51	29.01004 AU
retrograde	-3270 Mar 28 j 06:41	29° ℳ 13'25		opposition	-3263 Jul 03 j 01:01	13° ♂ 17'27	0°03'07
opposition	-3270 Jun 17 j 07:01	27° ℳ 49'08	0°39'52	direct	-3263 Sep 19 j 11:28	11° ♂ 54'38	
min. Earth dist.	-3270 Jun 16 j 15:13	27° ℳ 50'13	29.08265 AU				
direct	-3270 Sep 04 j 03:02	26° ℳ 26'24		conjunction	-3263 Dec 30 j 00:15	14° ♂ 21'50	0°00'30
				minimum elong	-3263 Dec 30 j 00:14	14° ♂ 21'50	0°00'24
conjunction	-3270 Dec 14 j 23:08	28° ℳ 53'39	0°34'58	behind sun begin	-3263 Dec 29 j 17:50	14° ♂ 21'15	
minimum elong	-3270 Dec 14 j 23:08	28° ℳ 53'39	0°34'52	behind sun end	-3263 Dec 30 j 06:38	14° ♂ 22'24	
max. Earth dist.	-3270 Dec 15 j 15:50	28° ℳ 55'14	31.07769 AU	max. Earth dist.	-3263 Dec 30 j 21:27	14° ♂ 23'50	31.00607 AU
	-3269 Jan 14 j 02:43	0° ♂		desc. node	-3262 Feb 03 j 12:05	15° ♂ 38'52	
retrograde	-3269 Mar 30 j 20:10	1° ♂ 26'05		retrograde	-3262 Apr 15 j 13:52	16° ♂ 55'09	
opposition	-3269 Jun 19 j 20:02	0° ♂ 01'45	0°34'44	opposition	-3262 Jul 05 j 13:41	15° ♂ 30'18	0°-2'-12
min. Earth dist.	-3269 Jun 19 j 02:48	0° ♂ 02'55	29.07288 AU	min. Earth dist.	-3262 Jul 04 j 15:48	15° ♂ 31'48	29.00278 AU
	-3269 Jun 20 j 21:36	30° ♀ ℳ		direct	-3262 Sep 21 j 21:53	14° ♂ 07'30	
direct	-3269 Sep 06 j 14:32	28° ℳ 39'00					
	-3269 Nov 17 j 05:34	0° ♂		conjunction	-3261 Jan 01 j 10:57	16° ♂ 34'43	0°-4'-34
conjunction	-3269 Dec 17 j 09:31	1° ♂ 06'14	0°30'08	minimum elong	-3261 Jan 01 j 10:57	16° ♂ 34'43	0°04'42
minimum elong	-3269 Dec 17 j 09:31	1° ♂ 06'14	0°30'03	behind sun begin	-3261 Jan 01 j 04:39	16° ♂ 34'09	
max. Earth dist.	-3269 Dec 18 j 02:00	1° ♂ 07'48	31.06732 AU	behind sun end	-3261 Jan 01 j 17:15	16° ♂ 35'18	
retrograde	-3268 Apr 01 j 09:11	3° ♂ 38'49		max. Earth dist.	-3261 Jan 02 j 08:59	16° ♂ 36'48	30.99921 AU
opposition	-3268 Jun 21 j 08:59	2° ♂ 14'23	0°29'33	retrograde	-3261 Apr 18 j 00:54	19° ♂ 08'12	
min. Earth dist.	-3268 Jun 20 j 16:22	2° ♂ 15'31	29.06204 AU	min. Earth dist.	-3261 Jul 07 j 05:00	17° ♂ 44'49	28.99635 AU
direct	-3268 Sep 08 j 00:20	0° ♂ 51'37		opposition	-3261 Jul 08 j 02:29	17° ♂ 43'20	0°-7'-33
				direct	-3261 Sep 24 j 08:04	16° ♂ 20'34	
conjunction	-3268 Dec 18 j 19:57	3° ♂ 18'50	0°25'16				
minimum elong	-3268 Dec 18 j 19:58	3° ♂ 18'50	0°25'10	conjunction	-3260 Jan 03 j 21:57	18° ♂ 47'50	0°-9'-33
max. Earth dist.	-3268 Dec 19 j 13:48	3° ♂ 20'31	31.05613 AU	minimum elong	-3260 Jan 03 j 21:57	18° ♂ 47'50	0°09'40
retrograde	-3267 Apr 03 j 21:44	5° ♂ 51'31		behind sun begin	-3260 Jan 03 j 16:37	18° ♂ 47'21	
opposition	-3267 Jun 23 j 21:51	4° ♂ 27'00	0°24'19	behind sun end	-3260 Jan 04 j 03:17	18° ♂ 48'19	
min. Earth dist.	-3267 Jun 23 j 03:53	4° ♂ 28'13	29.05050 AU	max. Earth dist.	-3260 Jan 04 j 20:54	18° ♂ 50'00	30.99314 AU
direct	-3267 Sep 10 j 13:21	3° ♂ 04'13		retrograde	-3260 Apr 19 j 14:04	21° ♂ 21'26	
				opposition	-3260 Jul 09 j 14:57	19° ♂ 56'34	0°-12'-53
conjunction	-3267 Dec 21 j 06:08	5° ♂ 31'24	0°20'22	min. Earth dist.	-3260 Jul 08 j 16:05	19° ♂ 58'09	28.99042 AU
minimum elong	-3267 Dec 21 j 06:07	5° ♂ 31'24	0°20'17	direct	-3260 Sep 25 j 18:31	18° ♂ 33'50	
max. Earth dist.	-3267 Dec 21 j 23:39	5° ♂ 33'03	31.04458 AU				
retrograde	-3266 Apr 06 j 12:11	8° ♂ 04'12		conjunction	-3259 Jan 05 j 08:58	21° ♂ 01'09	0°-14'-31
opposition	-3266 Jun 26 j 10:50	6° ♂ 39'35	0°19'04	minimum elong	-3259 Jan 05 j 08:58	21° ♂ 01'09	0°14'39
min. Earth dist.	-3266 Jun 25 j 16:39	6° ♂ 40'49	29.03911 AU	behind sun begin	-3259 Jan 05 j 06:11	21° ♂ 00'54	
direct	-3266 Sep 13 j 00:41	5° ♂ 16'46		behind sun end	-3259 Jan 05 j 11:45	21° ♂ 01'24	
				max. Earth dist.	-3259 Jan 06 j 07:43	21° ♂ 03'18	30.98720 AU
conjunction	-3266 Dec 23 j 16:39	7° ♂ 43'56	0°15'27	retrograde	-3259 Apr 22 j 03:26	23° ♂ 34'55	
minimum elong	-3266 Dec 23 j 16:39	7° ♂ 43'56	0°15'20	min. Earth dist.	-3259 Jul 11 j 05:36	22° ♂ 11'33	28.98450 AU
behind sun begin	-3266 Dec 23 j 14:32	7° ♂ 43'45		opposition	-3259 Jul 12 j 03:46	22° ♂ 10'01	0°-18'-13
behind sun end	-3266 Dec 23 j 18:46	7° ♂ 44'08		direct	-3259 Sep 28 j 03:19	20° ♂ 47'18	
max. Earth dist.	-3266 Dec 24 j 12:04	7° ♂ 45'46	31.03338 AU	conjunction	-3258 Jan 07 j 20:11	23° ♂ 14'40	0°-19'-29

Attention, astronomical year style is used: The year -3258 in astronomical counting style is the year 3259 BCE in historical counting style.

minimum elong	-3258 Jan 07 j 20:11	23° $\overline{\text{A}}$ 14'40	0°19'36	conjunction	-3250 Jan 25 j 17:30	11° $\overline{\text{B}}$ 04'04	0°-57'-38
max. Earth dist.	-3258 Jan 08 j 20:09	23° $\overline{\text{A}}$ 16'56	30.98106 AU	minimum elong	-3250 Jan 25 j 17:29	11° $\overline{\text{B}}$ 04'04	0°57'45
retrograde	-3258 Apr 24 j 16:58	25° $\overline{\text{A}}$ 48'34		max. Earth dist.	-3250 Jan 26 j 18:29	11° $\overline{\text{B}}$ 06'25	30.91273 AU
opposition	-3258 Jul 14 j 16:27	24° $\overline{\text{A}}$ 23'39	0°-23'-31	retrograde	-3250 May 13 j 01:38	13° $\overline{\text{B}}$ 38'32	
min. Earth dist.	-3258 Jul 13 j 17:19	24° $\overline{\text{A}}$ 25'15	28.97799 AU	opposition	-3250 Aug 01 j 20:02	12° $\overline{\text{B}}$ 13'11	-1°-4'-4
direct	-3258 Sep 30 j 16:11	23° $\overline{\text{A}}$ 00'57		min. Earth dist.	-3250 Jul 31 j 20:17	12° $\overline{\text{B}}$ 14'50	28.91036 AU
				direct	-3250 Oct 18 j 09:32	10° $\overline{\text{B}}$ 50'08	
conjunction	-3257 Jan 10 j 07:35	25° $\overline{\text{A}}$ 28'21	0°-24'-26				
minimum elong	-3257 Jan 10 j 07:34	25° $\overline{\text{A}}$ 28'21	0°24'33	conjunction	-3249 Jan 28 j 05:41	13° $\overline{\text{B}}$ 17'50	-1°-2'-5
max. Earth dist.	-3257 Jan 11 j 06:34	25° $\overline{\text{A}}$ 30'31	30.97409 AU	minimum elong	-3249 Jan 28 j 05:41	13° $\overline{\text{B}}$ 17'50	1°02'13
retrograde	-3257 Apr 27 j 08:12	28° $\overline{\text{A}}$ 02'21		max. Earth dist.	-3249 Jan 29 j 07:52	13° $\overline{\text{B}}$ 20'18	30.90696 AU
min. Earth dist.	-3257 Jul 16 j 06:28	26° $\overline{\text{A}}$ 38'58	28.97059 AU	retrograde	-3249 May 15 j 14:40	15° $\overline{\text{B}}$ 52'22	
opposition	-3257 Jul 17 j 05:07	26° $\overline{\text{A}}$ 37'24	0°-28'-47	min. Earth dist.	-3249 Aug 03 j 07:19	14° $\overline{\text{B}}$ 28'44	28.90512 AU
direct	-3257 Oct 03 j 02:51	25° $\overline{\text{A}}$ 14'40		opposition	-3249 Aug 04 j 08:02	14° $\overline{\text{B}}$ 27'01	-1°-8'-47
				direct	-3249 Oct 20 j 21:44	13° $\overline{\text{B}}$ 03'59	
conjunction	-3256 Jan 12 j 19:15	27° $\overline{\text{A}}$ 42'08	0°-29'-20				
minimum elong	-3256 Jan 12 j 19:15	27° $\overline{\text{A}}$ 42'08	0°29'27	conjunction	-3248 Jan 30 j 17:49	15° $\overline{\text{B}}$ 31'46	-1°-6'-28
max. Earth dist.	-3256 Jan 13 j 19:20	27° $\overline{\text{A}}$ 44'24	30.96602 AU	minimum elong	-3248 Jan 30 j 17:48	15° $\overline{\text{B}}$ 31'46	1°06'35
	-3256 Mar 28 j 02:52	0° $\overline{\text{B}}$		max. Earth dist.	-3248 Jan 31 j 19:06	15° $\overline{\text{B}}$ 34'09	30.90216 AU
retrograde	-3256 Apr 28 j 20:21	0° $\overline{\text{B}}$ 16'12		retrograde	-3248 May 17 j 05:25	18° $\overline{\text{B}}$ 06'24	
	-3256 May 31 j 04:23	30° $\overline{\text{R}}$ $\overline{\text{A}}$		opposition	-3248 Aug 05 j 20:17	16° $\overline{\text{B}}$ 41'04	-1°-13'-25
opposition	-3256 Jul 18 j 17:45	28° $\overline{\text{A}}$ 51'12	0°-34'-1	min. Earth dist.	-3248 Aug 04 j 19:59	16° $\overline{\text{B}}$ 42'45	28.90080 AU
min. Earth dist.	-3256 Jul 17 j 18:55	28° $\overline{\text{A}}$ 52'47	28.96191 AU	direct	-3248 Oct 22 j 07:37	15° $\overline{\text{B}}$ 18'02	
direct	-3256 Oct 04 j 15:16	27° $\overline{\text{A}}$ 28'26					
				conjunction	-3247 Feb 01 j 06:06	17° $\overline{\text{B}}$ 45'56	-1°-10'-44
conjunction	-3255 Jan 14 j 06:42	29° $\overline{\text{A}}$ 55'54	0°-34'-12	minimum elong	-3247 Feb 01 j 06:05	17° $\overline{\text{B}}$ 45'56	1°10'52
minimum elong	-3255 Jan 14 j 06:42	29° $\overline{\text{A}}$ 55'54	0°34'20	max. Earth dist.	-3247 Feb 02 j 08:38	17° $\overline{\text{B}}$ 48'26	30.89799 AU
max. Earth dist.	-3255 Jan 15 j 05:58	29° $\overline{\text{A}}$ 58'06	30.95690 AU	retrograde	-3247 May 19 j 18:09	20° $\overline{\text{B}}$ 20'40	
	-3255 Jan 16 j 02:02	0° $\overline{\text{B}}$		min. Earth dist.	-3247 Aug 07 j 07:59	18° $\overline{\text{B}}$ 57'03	28.89676 AU
retrograde	-3255 May 01 j 10:53	2° $\overline{\text{B}}$ 30'03		opposition	-3247 Aug 08 j 08:27	18° $\overline{\text{B}}$ 55'21	-1°-17'-56
min. Earth dist.	-3255 Jul 20 j 07:18	1° $\overline{\text{B}}$ 06'34	28.95244 AU	direct	-3247 Oct 24 j 19:15	17° $\overline{\text{B}}$ 32'20	
opposition	-3255 Jul 21 j 06:22	1° $\overline{\text{B}}$ 04'58	0°-39'-12				
	-3255 Sep 04 j 04:28	30° $\overline{\text{R}}$ $\overline{\text{A}}$		conjunction	-3246 Feb 03 j 18:34	20° $\overline{\text{B}}$ 00'20	-1°-14'-54
direct	-3255 Oct 07 j 02:47	29° $\overline{\text{A}}$ 42'09		minimum elong	-3246 Feb 03 j 18:34	20° $\overline{\text{B}}$ 00'20	1°15'01
	-3255 Nov 08 j 07:06	0° $\overline{\text{B}}$		max. Earth dist.	-3246 Feb 04 j 20:06	20° $\overline{\text{B}}$ 02'44	30.89400 AU
				retrograde	-3246 May 22 j 09:56	22° $\overline{\text{B}}$ 35'09	
conjunction	-3254 Jan 16 j 18:23	2° $\overline{\text{B}}$ 09'38	0°-39'-1	opposition	-3246 Aug 10 j 20:35	21° $\overline{\text{B}}$ 09'52	-1°-22'-20
minimum elong	-3254 Jan 16 j 18:23	2° $\overline{\text{B}}$ 09'37	0°39'08	min. Earth dist.	-3246 Aug 09 j 20:17	21° $\overline{\text{B}}$ 11'33	28.89272 AU
max. Earth dist.	-3254 Jan 17 j 18:36	2° $\overline{\text{B}}$ 11'55	30.94708 AU	direct	-3246 Oct 27 j 06:29	19° $\overline{\text{B}}$ 46'50	
retrograde	-3254 May 03 j 23:08	4° $\overline{\text{B}}$ 43'50					
opposition	-3254 Jul 23 j 18:53	3° $\overline{\text{B}}$ 18'40	0°-44'-19	conjunction	-3245 Feb 06 j 07:22	22° $\overline{\text{B}}$ 14'58	-1°-18'-58
min. Earth dist.	-3254 Jul 22 j 20:11	3° $\overline{\text{B}}$ 20'14	28.94258 AU	minimum elong	-3245 Feb 06 j 07:22	22° $\overline{\text{B}}$ 14'58	1°19'06
direct	-3254 Oct 09 j 15:25	1° $\overline{\text{B}}$ 55'47		max. Earth dist.	-3245 Feb 07 j 09:23	22° $\overline{\text{B}}$ 17'25	30.88949 AU
				retrograde	-3245 May 24 j 23:32	24° $\overline{\text{B}}$ 49'51	
conjunction	-3253 Jan 19 j 06:05	4° $\overline{\text{B}}$ 23'16	0°-43'-46	min. Earth dist.	-3245 Aug 12 j 09:22	23° $\overline{\text{B}}$ 26'12	28.88783 AU
minimum elong	-3253 Jan 19 j 06:04	4° $\overline{\text{B}}$ 23'16	0°43'55	opposition	-3245 Aug 13 j 08:46	23° $\overline{\text{B}}$ 24'34	-1°-26'-36
max. Earth dist.	-3253 Jan 20 j 06:08	4° $\overline{\text{B}}$ 25'32	30.93735 AU	direct	-3245 Oct 29 j 19:11	22° $\overline{\text{B}}$ 01'32	
retrograde	-3253 May 06 j 12:59	6° $\overline{\text{B}}$ 57'31					
min. Earth dist.	-3253 Jul 25 j 07:29	5° $\overline{\text{B}}$ 33'56	28.93307 AU	conjunction	-3244 Feb 08 j 20:14	24° $\overline{\text{B}}$ 29'44	-1°-22'-54
opposition	-3253 Jul 26 j 07:13	5° $\overline{\text{B}}$ 32'17	0°-49'-22	minimum elong	-3244 Feb 08 j 20:13	24° $\overline{\text{B}}$ 29'44	1°23'01
direct	-3253 Oct 12 j 02:57	4° $\overline{\text{B}}$ 09'21		max. Earth dist.	-3244 Feb 09 j 21:17	24° $\overline{\text{B}}$ 32'06	30.88409 AU
				retrograde	-3244 May 26 j 14:01	27° $\overline{\text{B}}$ 04'40	
conjunction	-3252 Jan 21 j 17:51	6° $\overline{\text{B}}$ 36'51	0°-48'-28	opposition	-3244 Aug 14 j 20:47	25° $\overline{\text{B}}$ 39'23	-1°-30'-45
minimum elong	-3252 Jan 21 j 17:50	6° $\overline{\text{B}}$ 36'51	0°48'35	min. Earth dist.	-3244 Aug 13 j 21:02	25° $\overline{\text{B}}$ 41'02	28.88192 AU
max. Earth dist.	-3252 Jan 22 j 18:16	6° $\overline{\text{B}}$ 39'10	30.92800 AU	direct	-3244 Oct 31 j 07:04	24° $\overline{\text{B}}$ 16'18	
retrograde	-3252 May 07 j 23:47	9° $\overline{\text{B}}$ 11'10					
opposition	-3252 Jul 27 j 19:28	7° $\overline{\text{B}}$ 45'52	0°-54'-21	conjunction	-3243 Feb 10 j 09:09	26° $\overline{\text{B}}$ 44'35	-1°-26'-43
min. Earth dist.	-3252 Jul 26 j 20:24	7° $\overline{\text{B}}$ 47'28	28.92428 AU	minimum elong	-3243 Feb 10 j 09:09	26° $\overline{\text{B}}$ 44'35	1°26'51
direct	-3252 Oct 13 j 13:34	6° $\overline{\text{B}}$ 22'53		max. Earth dist.	-3243 Feb 11 j 09:51	26° $\overline{\text{B}}$ 46'55	30.87753 AU
				retrograde	-3243 May 29 j 01:57	29° $\overline{\text{B}}$ 19'33	
conjunction	-3251 Jan 23 j 05:44	8° $\overline{\text{B}}$ 50'26	0°-53'-5	min. Earth dist.	-3243 Aug 16 j 10:29	27° $\overline{\text{B}}$ 55'48	28.87497 AU
minimum elong	-3251 Jan 23 j 05:44	8° $\overline{\text{B}}$ 50'26	0°53'13	opposition	-3243 Aug 17 j 08:56	27° $\overline{\text{B}}$ 54'13	-1°-34'-46
max. Earth dist.	-3251 Jan 24 j 06:56	8° $\overline{\text{B}}$ 52'49	30.91979 AU	direct	-3243 Nov 02 j 18:16	26° $\overline{\text{B}}$ 31'05	
retrograde	-3251 May 10 j 12:56	11° $\overline{\text{B}}$ 24'48					
min. Earth dist.	-3251 Jul 29 j 07:14	10° $\overline{\text{B}}$ 01'10	28.91669 AU	conjunction	-3242 Feb 12 j 22:06	28° $\overline{\text{B}}$ 59'26	-1°-30'-24
opposition	-3251 Jul 30 j 07:41	9° $\overline{\text{B}}$ 59'29	0°-59'-15	minimum elong	-3242 Feb 12 j 22:06	28° $\overline{\text{B}}$ 59'26	1°30'31
direct	-3251 Oct 16 j 00:31	8° $\overline{\text{B}}$ 36'27		max. Earth dist.	-3242 Feb 13 j 22:47	29° $\overline{\text{B}}$ 01'45	30.87026 AU

Attention, astronomical year style is used: The year -3242 in astronomical counting style is the year 3243 BCE in historical counting style.

	-3242 Mar 12 j 10:18	0°				-3234 Jan 03 j 09:48	15°	
retrograde	-3242 May 31 j 16:11	1°	34'23					
opposition	-3242 Aug 19 j 20:50	0°	09'01	-1°-38'-38	conjunction	-3234 Mar 03 j 07:54	16°	56'22 -1°-54'-30
min. Earth dist.	-3242 Aug 18 j 21:46	0°	10'38	28.86741 AU	minimum elong	-3234 Mar 03 j 07:53	16°	56'22 1°54'36
	-3242 Aug 25 j 05:54	30°	R		max. Earth dist.	-3234 Mar 04 j 06:56	16°	58'31 30.83477 AU
direct	-3242 Nov 05 j 06:10	28°	45'48		retrograde	-3234 Jun 19 j 00:04	19°	31'13
	-3241 Jan 12 j 04:08	0°			opposition	-3234 Sep 06 j 17:38	18°	05'48 -2°-3'-43
					min. Earth dist.	-3234 Sep 05 j 21:27	18°	07'13 28.83608 AU
conjunction	-3241 Feb 15 j 11:07	1°	14'12	-1°-33'-57	direct	-3234 Nov 23 j 00:17	16°	42'11
minimum elong	-3241 Feb 15 j 11:07	1°	14'11	1°34'04				
max. Earth dist.	-3241 Feb 16 j 10:55	1°	16'26	30.86251 AU	conjunction	-3233 Mar 05 j 21:46	19°	11'18 -1°-56'-47
retrograde	-3241 Jun 03 j 03:43	3°	49'08		minimum elong	-3233 Mar 05 j 21:46	19°	11'18 1°56'52
min. Earth dist.	-3241 Aug 21 j 10:55	2°	25'14	28.85983 AU	max. Earth dist.	-3233 Mar 06 j 20:21	19°	13'25 30.83448 AU
opposition	-3241 Aug 22 j 08:39	2°	23'42	-1°-42'-20	retrograde	-3233 Jun 21 j 15:03	21°	46'08
direct	-3241 Nov 07 j 15:55	1°	00'24		min. Earth dist.	-3233 Sep 08 j 08:28	20°	22'13 28.83563 AU
					opposition	-3233 Sep 09 j 04:54	20°	20'46 -2°-6'-3
conjunction	-3240 Feb 18 j 00:16	3°	28'51	-1°-37'-21	direct	-3233 Nov 25 j 12:29	18°	57'07
minimum elong	-3240 Feb 18 j 00:16	3°	28'51	1°37'27				
max. Earth dist.	-3240 Feb 19 j 00:47	3°	31'09	30.85510 AU	conjunction	-3232 Mar 07 j 11:40	21°	26'23 -1°-58'-53
retrograde	-3240 Jun 04 j 15:27	6°	03'45		minimum elong	-3232 Mar 07 j 11:39	21°	26'23 1°58'57
opposition	-3240 Aug 23 j 20:19	4°	38'18	-1°-45'-54	max. Earth dist.	-3232 Mar 08 j 08:57	21°	28'23 30.83366 AU
min. Earth dist.	-3240 Aug 22 j 21:55	4°	39'52	28.85278 AU	retrograde	-3232 Jun 23 j 03:09	24°	01'12
direct	-3240 Nov 09 j 04:28	3°	14'55		opposition	-3232 Sep 10 j 16:29	22°	35'52 -2°-8'-11
					min. Earth dist.	-3232 Sep 09 j 21:46	22°	37'11 28.83456 AU
conjunction	-3239 Feb 19 j 13:07	5°	43'25	-1°-40'-37	direct	-3232 Nov 26 j 22:35	21°	12'11
minimum elong	-3239 Feb 19 j 13:07	5°	43'25	1°40'44				
max. Earth dist.	-3239 Feb 20 j 12:30	5°	45'37	30.84846 AU	conjunction	-3231 Mar 10 j 01:36	23°	41'32 -2°00'-47
retrograde	-3239 Jun 07 j 04:33	8°	18'19		minimum elong	-3231 Mar 10 j 01:36	23°	41'32 2°00'53
min. Earth dist.	-3239 Aug 25 j 10:18	6°	54'21	28.84686 AU	max. Earth dist.	-3231 Mar 10 j 22:54	23°	43'32 30.83216 AU
opposition	-3239 Aug 26 j 08:06	6°	52'49	-1°-49'-18	retrograde	-3231 Jun 25 j 15:39	26°	16'19
direct	-3239 Nov 11 j 14:04	5°	29'21		min. Earth dist.	-3231 Sep 12 j 09:08	24°	52'20 28.83258 AU
					opposition	-3231 Sep 13 j 03:53	24°	51'00 -2°-10'-8
conjunction	-3238 Feb 22 j 02:23	7°	57'56	-1°-43'-43	direct	-3231 Nov 29 j 11:09	23°	27'16
minimum elong	-3238 Feb 22 j 02:22	7°	57'56	1°43'48				
max. Earth dist.	-3238 Feb 23 j 02:49	8°	00'13	30.84309 AU	conjunction	-3230 Mar 12 j 15:37	25°	56'43 -2°-2'-31
retrograde	-3238 Jun 09 j 16:48	10°	32'48		minimum elong	-3230 Mar 12 j 15:37	25°	56'43 2°02'35
opposition	-3238 Aug 28 j 19:35	9°	07'17	-1°-52'-32	max. Earth dist.	-3230 Mar 13 j 10:58	25°	58'32 30.82979 AU
min. Earth dist.	-3238 Aug 27 j 21:39	9°	08'49	28.84220 AU	retrograde	-3230 Jun 28 j 04:40	28°	31'26
direct	-3238 Nov 14 j 01:39	7°	43'45		opposition	-3230 Sep 15 j 15:13	27°	06'08 -2°-11'-53
					min. Earth dist.	-3230 Sep 14 j 21:48	27°	07'22 28.82999 AU
conjunction	-3237 Feb 24 j 15:35	10°	12'25	-1°-46'-39	direct	-3230 Dec 01 j 20:50	25°	42'19
minimum elong	-3237 Feb 24 j 15:35	10°	12'25	1°46'46				
max. Earth dist.	-3237 Feb 25 j 14:55	10°	14'37	30.83917 AU	conjunction	-3229 Mar 15 j 05:50	28°	11'51 -2°-4'-4
retrograde	-3237 Jun 12 j 07:29	12°	47'17		minimum elong	-3229 Mar 15 j 05:50	28°	11'51 2°04'09
min. Earth dist.	-3237 Aug 30 j 09:17	11°	23'18	28.83908 AU	max. Earth dist.	-3229 Mar 16 j 01:30	28°	13'42 30.82696 AU
opposition	-3237 Aug 31 j 07:10	11°	21'46	-1°-55'-36		-3229 May 07 j 09:32	0°	✠
direct	-3237 Nov 16 j 13:03	9°	58'11		retrograde	-3229 Jun 30 j 16:25	0°	✠46'29
						-3229 Aug 25 j 08:46	30°	R
conjunction	-3236 Feb 27 j 04:57	12°	26'57	-1°-49'-27	min. Earth dist.	-3229 Sep 17 j 09:27	29°	22'24 28.82702 AU
minimum elong	-3236 Feb 27 j 04:56	12°	26'57	1°49'32	opposition	-3229 Sep 18 j 02:26	29°	21'11 -2°-13'-26
max. Earth dist.	-3236 Feb 28 j 05:00	12°	29'13	30.83657 AU	direct	-3229 Dec 04 j 08:46	27°	57'18
	-3236 Jun 03 j 09:29	15°				-3228 Mar 04 j 19:10	0°	✠
retrograde	-3236 Jun 13 j 20:05	15°	01'48					
	-3236 Jun 24 j 08:54	15°	R		conjunction	-3228 Mar 16 j 19:45	0°	✠26'55 -2°-5'-25
opposition	-3236 Sep 01 j 18:39	13°	36'18	-1°-58'-29	minimum elong	-3228 Mar 16 j 19:45	0°	✠26'55 2°05'30
min. Earth dist.	-3236 Aug 31 j 21:27	13°	37'48	28.83715 AU	max. Earth dist.	-3228 Mar 17 j 13:43	0°	✠28'36 30.82410 AU
direct	-3236 Nov 18 j 01:19	12°	12'43		retrograde	-3228 Jul 02 j 05:52	3°	✠01'28
					opposition	-3228 Sep 19 j 13:34	1°	✠36'10 -2°-14'-47
conjunction	-3235 Feb 28 j 18:20	14°	41'35	-1°-52'-4	min. Earth dist.	-3228 Sep 18 j 21:05	1°	✠37'20 28.82446 AU
minimum elong	-3235 Feb 28 j 18:20	14°	41'35	1°52'10	direct	-3228 Dec 05 j 20:24	0°	✠12'11
max. Earth dist.	-3235 Mar 01 j 17:35	14°	43'46	30.83532 AU				
	-3235 Mar 08 j 22:45	15°			conjunction	-3227 Mar 19 j 09:52	2°	✠41'53 -2°-6'-35
retrograde	-3235 Jun 16 j 10:54	17°	16'26		minimum elong	-3227 Mar 19 j 09:52	2°	✠41'53 2°06'40
min. Earth dist.	-3235 Sep 03 j 08:27	15°	52'30	28.83641 AU	max. Earth dist.	-3227 Mar 20 j 04:15	2°	✠43'36 30.82179 AU
opposition	-3235 Sep 04 j 06:05	15°	50'58	-2°-1'-11	retrograde	-3227 Jul 04 j 17:36	5°	✠16'21
	-3235 Oct 06 j 14:10	15°	R		min. Earth dist.	-3227 Sep 21 j 09:07	3°	✠52'09 28.82264 AU
direct	-3235 Nov 20 j 12:55	14°	27'21		opposition	-3227 Sep 22 j 00:37	3°	✠51'03 -2°-15'-56

Attention, astronomical year style is used: The year -3227 in astronomical counting style is the year 3228 BCE in historical counting style.

direct	-3227 Dec 08 j 08:43	2°♂27'00		minimum elong	-3218 Apr 09 j 19:00	22°♂57'37	2°08'17
				max. Earth dist.	-3218 Apr 10 j 06:19	22°♂58'40	30.84629 AU
conjunction	-3226 Mar 21 j 23:54	4°♂56'48	-2°-7'-34	retrograde	-3218 Jul 25 j 13:09	25°♂31'15	
minimum elong	-3226 Mar 21 j 23:54	4°♂56'48	2°07'37	opposition	-3218 Oct 12 j 02:46	24°♂06'27	-2°-16'-44
max. Earth dist.	-3226 Mar 22 j 17:04	4°♂58'24	30.82062 AU	min. Earth dist.	-3218 Oct 11 j 17:55	24°♂07'05	28.84906 AU
retrograde	-3226 Jul 07 j 07:55	7°♂31'11		direct	-3218 Dec 28 j 17:19	22°♂42'06	
opposition	-3226 Sep 24 j 11:35	6°♂05'53	-2°-16'-52				
min. Earth dist.	-3226 Sep 23 j 19:49	6°♂07'00	28.82210 AU	conjunction	-3217 Apr 12 j 09:39	25°♂12'49	-2°-7'-27
direct	-3226 Dec 10 j 20:37	4°♂41'46		minimum elong	-3217 Apr 12 j 09:39	25°♂12'49	2°07'29
				max. Earth dist.	-3217 Apr 12 j 18:56	25°♂13'41	30.84863 AU
conjunction	-3225 Mar 24 j 14:05	7°♂11'40	-2°-8'-21	retrograde	-3217 Jul 28 j 02:30	27°♂46'19	
minimum elong	-3225 Mar 24 j 14:05	7°♂11'40	2°08'24	opposition	-3217 Oct 14 j 13:26	26°♂21'32	-2°-15'-46
max. Earth dist.	-3225 Mar 25 j 07:01	7°♂13'15	30.82063 AU	min. Earth dist.	-3217 Oct 14 j 04:52	26°♂22'09	28.85107 AU
retrograde	-3225 Jul 09 j 20:48	9°♂45'58		direct	-3217 Dec 31 j 05:33	24°♂57'06	
opposition	-3225 Sep 26 j 22:32	8°♂20'42	-2°-17'-35				
min. Earth dist.	-3225 Sep 26 j 08:05	8°♂21'44	28.82291 AU	conjunction	-3216 Apr 14 j 00:17	27°♂27'53	-2°-6'-28
direct	-3225 Dec 13 j 08:43	6°♂56'33		minimum elong	-3216 Apr 14 j 00:17	27°♂27'53	2°06'29
				max. Earth dist.	-3216 Apr 14 j 08:58	27°♂28'42	30.85043 AU
conjunction	-3224 Mar 26 j 04:15	9°♂26'33	-2°-8'-56		-3216 Jul 21 j 03:46	0°♀	
minimum elong	-3224 Mar 26 j 04:15	9°♂26'33	2°08'59	retrograde	-3216 Jul 29 j 14:13	0°♀01'13	
max. Earth dist.	-3224 Mar 26 j 20:44	9°♂28'06	30.82230 AU		-3216 Aug 07 j 02:45	30°♂	
retrograde	-3224 Jul 11 j 11:23	12°♂00'46		opposition	-3216 Oct 16 j 00:13	28°♂36'27	-2°-14'-37
opposition	-3224 Sep 28 j 09:25	10°♂35'33	-2°-18'-6	min. Earth dist.	-3216 Oct 15 j 17:24	28°♂36'56	28.85282 AU
min. Earth dist.	-3224 Sep 27 j 18:24	10°♂36'37	28.82528 AU	direct	-3215 Jan 01 j 18:17	27°♂11'57	
direct	-3224 Dec 14 j 21:41	9°♂11'23					
				conjunction	-3215 Apr 16 j 14:44	29°♂42'47	-2°-5'-17
conjunction	-3223 Mar 28 j 18:17	11°♂41'29	-2°-9'-19	minimum elong	-3215 Apr 16 j 14:45	29°♂42'47	2°05'18
minimum elong	-3223 Mar 28 j 18:17	11°♂41'29	2°09'22	max. Earth dist.	-3215 Apr 16 j 22:21	29°♂43'29	30.85237 AU
max. Earth dist.	-3223 Mar 29 j 09:54	11°♂42'57	30.82534 AU		-3215 Apr 24 j 07:45	0°♀	
retrograde	-3223 Jul 13 j 23:23	14°♂15'38		retrograde	-3215 Aug 01 j 03:39	2°♀15'57	
opposition	-3223 Sep 30 j 20:26	12°♂50'30	-2°-18'-24	opposition	-3215 Oct 18 j 10:46	0°♀51'12	-2°-13'-15
min. Earth dist.	-3223 Sep 30 j 06:57	12°♂51'27	28.82899 AU	min. Earth dist.	-3215 Oct 18 j 03:49	0°♀51'42	28.85483 AU
direct	-3223 Dec 17 j 08:08	11°♂26'19			-3215 Nov 19 j 14:47	30°♂	
				direct	-3214 Jan 04 j 08:05	29°♂26'36	
conjunction	-3222 Mar 31 j 08:42	13°♂56'32	-2°-9'-30		-3214 Feb 18 j 06:08	0°♀	
minimum elong	-3222 Mar 31 j 08:42	13°♂56'32	2°09'33				
max. Earth dist.	-3222 Apr 01 j 00:23	13°♂58'00	30.82962 AU	conjunction	-3214 Apr 19 j 05:18	1°♀57'31	-2°-3'-55
retrograde	-3222 Jul 16 j 12:43	16°♂30'35		minimum elong	-3214 Apr 19 j 05:19	1°♀57'31	2°03'55
opposition	-3222 Oct 03 j 07:10	15°♂05'32	-2°-18'-30	max. Earth dist.	-3214 Apr 19 j 11:47	1°♀58'07	30.85465 AU
min. Earth dist.	-3222 Oct 02 j 17:40	15°♂06'30	28.83353 AU	retrograde	-3214 Aug 03 j 15:31	4°♀30'31	
direct	-3222 Dec 19 j 20:33	13°♂41'21		opposition	-3214 Oct 20 j 21:20	3°♀05'48	-2°-11'-41
				min. Earth dist.	-3214 Oct 20 j 16:08	3°♀06'11	28.85755 AU
conjunction	-3221 Apr 02 j 23:08	16°♂11'42	-2°-9'-29	direct	-3213 Jan 06 j 19:19	1°♀41'08	
minimum elong	-3221 Apr 02 j 23:08	16°♂11'42	2°09'32				
max. Earth dist.	-3221 Apr 03 j 12:55	16°♂12'59	30.83438 AU	conjunction	-3213 Apr 21 j 19:54	4°♀12'07	-2°-2'-21
retrograde	-3221 Jul 19 j 02:04	18°♂45'41		minimum elong	-3213 Apr 21 j 19:55	4°♀12'07	2°02'22
opposition	-3221 Oct 05 j 18:07	17°♂20'43	-2°-18'-22	max. Earth dist.	-3213 Apr 22 j 02:12	4°♀12'42	30.85791 AU
min. Earth dist.	-3221 Oct 05 j 06:02	17°♂21'34	28.83841 AU	retrograde	-3213 Aug 06 j 04:38	6°♀44'57	
direct	-3221 Dec 22 j 06:05	15°♂56'30		opposition	-3213 Oct 23 j 07:50	5°♀20'18	-2°-9'-55
				min. Earth dist.	-3213 Oct 23 j 02:31	5°♀20'40	28.86128 AU
conjunction	-3220 Apr 04 j 13:39	18°♂26'58	-2°-9'-16	direct	-3212 Jan 09 j 08:36	3°♀55'35	
minimum elong	-3220 Apr 04 j 13:39	18°♂26'58	2°09'18				
max. Earth dist.	-3220 Apr 05 j 03:29	18°♂28'16	30.83906 AU	conjunction	-3212 Apr 23 j 10:09	6°♀26'38	-2°00'-36
retrograde	-3220 Jul 20 j 13:07	21°♂00'52		minimum elong	-3212 Apr 23 j 10:09	6°♀26'38	2°00'37
opposition	-3220 Oct 07 j 05:00	19°♂35'58	-2°-18'-2	max. Earth dist.	-3212 Apr 23 j 14:50	6°♀27'04	30.86230 AU
min. Earth dist.	-3220 Oct 06 j 17:38	19°♂36'47	28.84276 AU	retrograde	-3212 Aug 07 j 17:09	8°♀59'21	
direct	-3220 Dec 23 j 18:18	18°♂11'45		opposition	-3212 Oct 24 j 18:25	7°♀34'44	-2°-7'-57
				min. Earth dist.	-3212 Oct 24 j 14:11	7°♀35'02	28.86641 AU
conjunction	-3219 Apr 07 j 04:13	20°♂42'18	-2°-8'-52	direct	-3211 Jan 10 j 18:53	6°♀10'00	
minimum elong	-3219 Apr 07 j 04:14	20°♂42'18	2°08'54				
max. Earth dist.	-3219 Apr 07 j 15:45	20°♂43'22	30.84314 AU	conjunction	-3211 Apr 26 j 00:41	8°♀41'08	-1°-58'-41
retrograde	-3219 Jul 23 j 01:48	23°♂16'05		minimum elong	-3211 Apr 26 j 00:42	8°♀41'08	1°58'41
opposition	-3219 Oct 09 j 15:51	21°♂51'15	-2°-17'-29	max. Earth dist.	-3211 Apr 26 j 05:39	8°♀41'36	30.86814 AU
min. Earth dist.	-3219 Oct 09 j 05:27	21°♂51'59	28.84644 AU	retrograde	-3211 Aug 10 j 03:51	11°♀13'42	
direct	-3219 Dec 26 j 05:22	20°♂26'57		opposition	-3211 Oct 27 j 04:49	9°♀49'12	-2°-5'-47
				min. Earth dist.	-3211 Oct 27 j 01:01	9°♀49'28	28.87277 AU
conjunction	-3218 Apr 09 j 19:00	22°♂57'37	-2°-8'-15	direct	-3210 Jan 13 j 07:16	8°♀24'27	

Attention, astronomical year style is used: The year -3210 in astronomical counting style is the year 3211 BCE in historical counting style.

conjunction	-3210 Apr 28 j 15:07	10° Υ 55'41	-1°-56'-34			-3202 Jun 17 j 13:51	0° δ	
minimum elong	-3210 Apr 28 j 15:07	10° Υ 55'41	1°56'34	retrograde		-3202 Aug 30 j 14:49	1° δ 24'00	
max. Earth dist.	-3210 Apr 28 j 18:05	10° Υ 55'57	30.87520 AU	opposition		-3202 Nov 16 j 02:43	0° δ 00'07	-1°-38'-16
retrograde	-3210 Aug 12 j 16:09	13° Υ 28'08		min. Earth dist.		-3202 Nov 16 j 07:49	29° Υ 59'45	28.92820 AU
opposition	-3210 Oct 29 j 15:17	12° Υ 03'44	-2°-3'-26			-3202 Nov 16 j 04:16	30° κ Υ	
min. Earth dist.	-3210 Oct 29 j 12:09	12° Υ 03'57	28.88027 AU	direct		-3201 Feb 02 j 22:01	28° Υ 35'00	
direct	-3209 Jan 15 j 17:46	10° Υ 38'58				-3201 Apr 19 j 00:50	0° δ	
conjunction	-3209 May 01 j 05:42	13° Υ 10'20	-1°-54'-17	conjunction		-3201 May 20 j 00:59	1° δ 06'49	-1°-30'-8
minimum elong	-3209 May 01 j 05:43	13° Υ 10'20	1°54'16	minimum elong		-3201 May 20 j 00:59	1° δ 06'50	1°30'05
max. Earth dist.	-3209 May 01 j 08:51	13° Υ 10'37	30.88299 AU	max. Earth dist.		-3201 May 19 j 17:51	1° δ 06'10	30.93012 AU
retrograde	-3209 Aug 15 j 03:08	15° Υ 42'40		retrograde		-3201 Sep 02 j 02:40	3° δ 37'46	
opposition	-3209 Nov 01 j 01:46	14° Υ 18'23	-2°00'-53	opposition		-3201 Nov 18 j 12:56	2° δ 13'55	-1°-34'-25
min. Earth dist.	-3209 Nov 01 j 00:04	14° Υ 18'30	28.88815 AU	min. Earth dist.		-3201 Nov 18 j 18:32	2° δ 13'31	28.93382 AU
direct	-3208 Jan 18 j 04:42	12° Υ 53'37		direct		-3200 Feb 05 j 09:08	0° δ 48'44	
conjunction	-3208 May 02 j 20:10	15° Υ 25'05	-1°-51'-49	conjunction		-3200 May 21 j 15:05	3° δ 20'35	-1°-26'-28
minimum elong	-3208 May 02 j 20:10	15° Υ 25'05	1°51'48	minimum elong		-3200 May 21 j 15:05	3° δ 20'36	1°26'26
max. Earth dist.	-3208 May 02 j 21:19	15° Υ 25'12	30.89104 AU	max. Earth dist.		-3200 May 21 j 08:23	3° δ 19'58	30.93628 AU
retrograde	-3208 Aug 16 j 15:51	17° Υ 57'19		retrograde		-3200 Sep 03 j 12:28	5° δ 51'21	
opposition	-3208 Nov 02 j 12:11	16° Υ 33'08	-1°-58'-9	opposition		-3200 Nov 19 j 23:12	4° δ 27'33	-1°-30'-26
min. Earth dist.	-3208 Nov 02 j 10:46	16° Υ 33'14	28.89603 AU	min. Earth dist.		-3200 Nov 20 j 05:56	4° δ 27'04	28.94057 AU
direct	-3207 Jan 19 j 16:15	15° Υ 08'21		direct		-3199 Feb 06 j 20:25	3° δ 02'19	
conjunction	-3207 May 05 j 10:43	17° Υ 39'56	-1°-49'-10	conjunction		-3199 May 24 j 04:55	5° δ 34'11	-1°-22'-41
minimum elong	-3207 May 05 j 10:44	17° Υ 39'56	1°49'09	minimum elong		-3199 May 24 j 04:56	5° δ 34'11	1°22'37
max. Earth dist.	-3207 May 05 j 11:15	17° Υ 39'59	30.89857 AU	max. Earth dist.		-3199 May 23 j 20:36	5° δ 33'25	30.94386 AU
retrograde	-3207 Aug 19 j 02:58	20° Υ 12'01		retrograde		-3199 Sep 05 j 23:38	8° δ 04'47	
opposition	-3207 Nov 04 j 22:50	18° Υ 47'55	-1°-55'-15	opposition		-3199 Nov 22 j 09:23	6° δ 41'03	-1°-26'-19
min. Earth dist.	-3207 Nov 04 j 23:25	18° Υ 47'53	28.90313 AU	min. Earth dist.		-3199 Nov 22 j 15:53	6° δ 40'35	28.94878 AU
direct	-3206 Jan 22 j 05:01	17° Υ 23'08		direct		-3198 Feb 09 j 08:14	5° δ 15'47	
conjunction	-3206 May 08 j 01:20	19° Υ 54'47	-1°-46'-22	conjunction		-3198 May 26 j 18:57	7° δ 47'43	-1°-18'-46
minimum elong	-3206 May 08 j 01:21	19° Υ 54'47	1°46'21	minimum elong		-3198 May 26 j 18:58	7° δ 47'43	1°18'43
max. Earth dist.	-3206 May 08 j 00:09	19° Υ 54'40	30.90530 AU	max. Earth dist.		-3198 May 26 j 10:39	7° δ 46'56	30.95273 AU
retrograde	-3206 Aug 21 j 15:52	22° Υ 26'43		retrograde		-3198 Sep 08 j 09:17	10° δ 18'08	
opposition	-3206 Nov 07 j 09:11	21° Υ 02'41	-1°-52'-10	opposition		-3198 Nov 24 j 19:39	8° δ 54'29	-1°-22'-4
min. Earth dist.	-3206 Nov 07 j 09:56	21° Υ 02'38	28.90923 AU	min. Earth dist.		-3198 Nov 25 j 03:42	8° δ 53'55	28.95823 AU
direct	-3205 Jan 24 j 18:46	19° Υ 37'51		direct		-3197 Feb 11 j 19:50	7° δ 29'14	
conjunction	-3205 May 10 j 15:55	22° Υ 09'34	-1°-43'-25	conjunction		-3197 May 29 j 08:50	10° δ 01'13	-1°-14'-43
minimum elong	-3205 May 10 j 15:55	22° Υ 09'34	1°43'24	minimum elong		-3197 May 29 j 08:50	10° δ 01'13	1°14'40
max. Earth dist.	-3205 May 10 j 13:19	22° Υ 09'20	30.91092 AU	max. Earth dist.		-3197 May 28 j 23:20	10° δ 00'20	30.96287 AU
retrograde	-3205 Aug 24 j 03:39	24° Υ 41'20		retrograde		-3197 Sep 10 j 21:31	12° δ 31'30	
opposition	-3205 Nov 09 j 19:47	23° Υ 17'20	-1°-48'-56	opposition		-3197 Nov 27 j 05:52	11° δ 07'57	-1°-17'-42
min. Earth dist.	-3205 Nov 09 j 22:35	23° Υ 17'08	28.91444 AU	min. Earth dist.		-3197 Nov 27 j 13:37	11° δ 07'24	28.96865 AU
direct	-3204 Jan 27 j 06:21	21° Υ 52'27		direct		-3196 Feb 14 j 08:23	9° δ 42'42	
conjunction	-3204 May 12 j 06:15	24° Υ 24'12	-1°-40'-18	conjunction		-3196 May 30 j 22:34	12° δ 14'45	-1°-10'-35
minimum elong	-3204 May 12 j 06:16	24° Υ 24'12	1°40'17	minimum elong		-3196 May 30 j 22:34	12° δ 14'45	1°10'31
max. Earth dist.	-3204 May 12 j 03:01	24° Υ 23'54	30.91588 AU	max. Earth dist.		-3196 May 30 j 12:18	12° δ 13'48	30.97352 AU
retrograde	-3204 Aug 25 j 16:40	26° Υ 55'46		retrograde		-3196 Sep 12 j 08:37	14° δ 44'55	
opposition	-3204 Nov 11 j 06:09	25° Υ 31'49	-1°-45'-32	opposition		-3196 Nov 28 j 16:15	13° δ 21'29	-1°-13'-12
min. Earth dist.	-3204 Nov 11 j 09:12	25° Υ 31'36	28.91900 AU	min. Earth dist.		-3196 Nov 29 j 01:48	13° δ 20'48	28.97940 AU
direct	-3203 Jan 28 j 20:52	24° Υ 06'52		direct		-3195 Feb 15 j 19:36	11° δ 56'14	
conjunction	-3203 May 14 j 20:34	26° Υ 38'38	-1°-37'-3	conjunction		-3195 Jun 02 j 12:29	14° δ 28'22	-1°-6'-19
minimum elong	-3203 May 14 j 20:35	26° Υ 38'39	1°37'02	minimum elong		-3195 Jun 02 j 12:29	14° δ 28'22	1°06'15
max. Earth dist.	-3203 May 14 j 15:27	26° Υ 38'10	30.92037 AU	max. Earth dist.		-3195 Jun 02 j 01:34	14° δ 27'21	30.98422 AU
retrograde	-3203 Aug 28 j 04:28	29° Υ 10'00				-3195 Jun 16 j 19:18	15° δ	
opposition	-3203 Nov 13 j 16:25	27° Υ 46'05	-1°-41'-58	retrograde		-3195 Sep 14 j 21:05	16° δ 58'22	
min. Earth dist.	-3203 Nov 13 j 20:55	27° Υ 45'45	28.92350 AU	opposition		-3195 Dec 01 j 02:26	15° δ 35'02	-1°-8'-36
direct	-3202 Jan 31 j 08:38	26° Υ 21'02		min. Earth dist.		-3195 Dec 01 j 12:18	15° δ 34'20	28.98971 AU
conjunction	-3202 May 17 j 10:58	28° Υ 52'51	-1°-33'-40	direct		-3195 Dec 22 j 09:20	15° κ δ	
minimum elong	-3202 May 17 j 10:59	28° Υ 52'51	1°33'38			-3194 Feb 18 j 09:49	14° δ 09'49	
max. Earth dist.	-3202 May 17 j 05:48	28° Υ 52'22	30.92500 AU			-3194 Apr 16 j 00:19	15° δ	

Attention, astronomical year style is used: The year -3194 in astronomical counting style is the year 3195 BCE in historical counting style.

conjunction	-3194 Jun 05 j 02:22	16° 8 42'00	-1°-1'-58	direct	-3186 Mar 08 j 09:35	1° II 54'45	
minimum elong	-3194 Jun 05 j 02:23	16° 8 42'00	1°01'55				
max. Earth dist.	-3194 Jun 04 j 13:37	16° 8 40'49	30.99416 AU	conjunction	-3186 Jun 23 j 13:07	4° II 27'00	0°-24'-36
retrograde	-3194 Sep 17 j 08:59	19° 8 11'51		minimum elong	-3186 Jun 23 j 13:07	4° II 27'00	0°24'32
opposition	-3194 Dec 03 j 12:54	17° 8 48'37	-1°-3'-54	max. Earth dist.	-3186 Jun 22 j 18:54	4° II 25'19	31.05876 AU
min. Earth dist.	-3194 Dec 04 j 00:11	17° 8 47'49	28.99926 AU	retrograde	-3186 Oct 04 j 20:54	6° II 55'32	
direct	-3193 Feb 20 j 21:41	16° 8 23'23		opposition	-3186 Dec 20 j 23:31	5° II 32'46	0°-23'-42
				min. Earth dist.	-3186 Dec 21 j 15:35	5° II 31'38	29.06431 AU
conjunction	-3193 Jun 07 j 16:09	18° 8 55'36	0°-57'-32	direct	-3185 Mar 10 j 23:42	4° II 07'19	
minimum elong	-3193 Jun 07 j 16:10	18° 8 55'36	0°57'28	max. Earth dist.	-3185 Jun 25 j 06:41	6° II 37'49	31.06979 AU
max. Earth dist.	-3193 Jun 07 j 03:11	18° 8 54'24	31.00321 AU				
retrograde	-3193 Sep 19 j 19:38	21° 8 25'18		conjunction	-3185 Jun 26 j 01:51	6° II 39'35	0°-19'-42
opposition	-3193 Dec 05 j 23:18	20° 8 02'08	0°-59'-6	minimum elong	-3185 Jun 26 j 01:51	6° II 39'35	0°19'37
min. Earth dist.	-3193 Dec 06 j 11:24	20° 8 01'17	29.00770 AU	retrograde	-3185 Oct 07 j 08:12	9° II 08'01	
direct	-3192 Feb 23 j 11:12	18° 8 36'53		opposition	-3185 Dec 23 j 09:56	7° II 45'19	0°-18'-27
				min. Earth dist.	-3185 Dec 24 j 02:47	7° II 44'08	29.07590 AU
conjunction	-3192 Jun 09 j 05:45	21° 8 09'08	0°-53'00	direct	-3184 Mar 12 j 11:08	6° II 19'54	
minimum elong	-3192 Jun 09 j 05:46	21° 8 09'08	0°52'57				
max. Earth dist.	-3192 Jun 08 j 14:35	21° 8 07'44	31.01129 AU	conjunction	-3184 Jun 27 j 14:43	8° II 52'12	0°-14'-47
retrograde	-3192 Sep 21 j 07:47	23° 8 38'40		minimum elong	-3184 Jun 27 j 14:43	8° II 52'12	0°14'43
opposition	-3192 Dec 07 j 09:35	22° 8 15'34	0°-54'-14	behind sun begin	-3184 Jun 27 j 12:12	8° II 51'58	
min. Earth dist.	-3192 Dec 07 j 22:23	22° 8 14'39	29.01543 AU	behind sun end	-3184 Jun 27 j 17:13	8° II 52'25	
direct	-3191 Feb 24 j 22:46	20° 8 50'16		max. Earth dist.	-3184 Jun 26 j 19:57	8° II 50'28	31.08171 AU
				retrograde	-3184 Oct 08 j 18:58	11° II 20'30	
conjunction	-3191 Jun 11 j 19:24	23° 8 22'32	0°-48'-25	opposition	-3184 Dec 24 j 20:16	9° II 57'55	0°-13'-10
minimum elong	-3191 Jun 11 j 19:25	23° 8 22'32	0°48'20	min. Earth dist.	-3184 Dec 25 j 13:39	9° II 56'42	29.08788 AU
max. Earth dist.	-3191 Jun 11 j 04:22	23° 8 21'08	31.01866 AU	direct	-3183 Mar 15 j 00:17	8° II 32'32	
retrograde	-3191 Sep 23 j 17:21	25° 8 51'53		max. Earth dist.	-3183 Jun 29 j 06:55	11° II 02'57	31.09371 AU
opposition	-3191 Dec 09 j 19:58	24° 8 28'50	0°-49'-17				
min. Earth dist.	-3191 Dec 10 j 10:14	24° 8 27'50	29.02244 AU	conjunction	-3183 Jun 30 j 03:27	11° II 04'51	0°-9'-51
direct	-3190 Feb 27 j 10:44	23° 8 03'31		minimum elong	-3183 Jun 30 j 03:27	11° II 04'51	0°09'45
				behind sun begin	-3183 Jun 29 j 22:06	11° II 04'23	
conjunction	-3190 Jun 14 j 08:46	25° 8 35'46	0°-43'-45	behind sun end	-3183 Jun 30 j 08:48	11° II 05'20	
minimum elong	-3190 Jun 14 j 08:47	25° 8 35'46	0°43'41	retrograde	-3183 Oct 11 j 07:44	13° II 33'02	
max. Earth dist.	-3190 Jun 13 j 15:53	25° 8 34'12	31.02562 AU	opposition	-3183 Dec 27 j 06:46	12° II 10'33	0°-7'-52
retrograde	-3190 Sep 26 j 03:47	28° 8 04'56		min. Earth dist.	-3183 Dec 28 j 00:32	12° II 09'18	29.09975 AU
opposition	-3190 Dec 12 j 06:12	26° 8 41'56	0°-44'-17	direct	-3182 Mar 17 j 12:42	10° II 45'12	
min. Earth dist.	-3190 Dec 12 j 20:22	26° 8 40'56	29.02935 AU				
direct	-3189 Mar 01 j 22:55	25° 8 16'34		conjunction	-3182 Jul 02 j 16:17	13° II 17'32	0°-4'-55
				minimum elong	-3182 Jul 02 j 16:17	13° II 17'32	0°04'50
conjunction	-3189 Jun 16 j 22:07	27° 8 48'49	0°-39'-2	behind sun begin	-3182 Jul 02 j 09:53	13° II 16'58	
minimum elong	-3189 Jun 16 j 22:08	27° 8 48'49	0°38'57	behind sun end	-3182 Jul 02 j 22:41	13° II 18'06	
max. Earth dist.	-3189 Jun 16 j 05:24	27° 8 47'16	31.03260 AU	max. Earth dist.	-3182 Jul 01 j 20:08	13° II 15'40	31.10513 AU
	-3189 Aug 27 j 05:56	0° II		retrograde	-3182 Oct 13 j 17:09	15° II 45'36	
retrograde	-3189 Sep 28 j 12:34	0° II 17'49		opposition	-3182 Dec 29 j 17:26	14° II 23'12	0°-2'-34
	-3189 Oct 31 j 08:02	30° R 8		min. Earth dist.	-3182 Dec 30 j 12:37	14° II 21'51	29.11068 AU
opposition	-3189 Dec 14 j 16:37	28° 8 54'51	0°-39'-13	direct	-3181 Mar 20 j 01:24	12° II 57'52	
min. Earth dist.	-3189 Dec 15 j 08:15	28° 8 53'45	29.03659 AU	asc. node	-3181 Jun 26 j 18:51	15° II 11'26	
direct	-3188 Mar 03 j 10:14	27° 8 29'26		max. Earth dist.	-3181 Jul 04 j 06:59	15° II 28'10	31.11556 AU
	-3188 Jun 17 j 16:58	0° II					
conjunction	-3188 Jun 18 j 11:02	0° II 01'41	0°-34'-16	conjunction	-3181 Jul 05 j 04:56	15° II 30'12	0°00'07
minimum elong	-3188 Jun 18 j 11:03	0° II 01'41	0°34'12	minimum elong	-3181 Jul 05 j 04:55	15° II 30'12	0°00'14
max. Earth dist.	-3188 Jun 17 j 17:18	0° II 00'02	31.04027 AU	behind sun begin	-3181 Jul 04 j 22:26	15° II 29'37	
retrograde	-3188 Sep 29 j 23:39	2° II 30'31		behind sun end	-3181 Jul 05 j 11:24	15° II 30'46	
opposition	-3188 Dec 16 j 02:51	1° II 07'36	0°-34'-5	retrograde	-3181 Oct 16 j 04:05	17° II 58'07	
min. Earth dist.	-3188 Dec 16 j 17:56	1° II 06'32	29.04464 AU	opposition	-3180 Jan 01 j 04:03	16° II 35'47	0°02'44
	-3187 Jan 31 j 09:29	30° R 8		min. Earth dist.	-3180 Jan 01 j 23:04	16° II 34'28	29.12056 AU
direct	-3187 Mar 05 j 22:08	29° 8 42'09		direct	-3180 Mar 21 j 13:32	15° II 10'27	
	-3187 Apr 08 j 05:21	0° II					
max. Earth dist.	-3187 Jun 20 j 06:01	2° II 12'43	31.04883 AU	conjunction	-3180 Jul 06 j 17:29	17° II 42'46	0°05'09
				minimum elong	-3180 Jul 06 j 17:30	17° II 42'46	0°05'15
conjunction	-3187 Jun 21 j 00:07	2° II 14'23	0°-29'-27	behind sun begin	-3180 Jul 06 j 11:09	17° II 42'12	
minimum elong	-3187 Jun 21 j 00:07	2° II 14'23	0°29'22	behind sun end	-3180 Jul 06 j 23:50	17° II 43'20	
retrograde	-3187 Oct 02 j 09:30	4° II 43'04		max. Earth dist.	-3180 Jul 05 j 19:38	17° II 40'45	31.12472 AU
opposition	-3187 Dec 18 j 13:10	3° II 20'13	0°-28'-55	retrograde	-3180 Oct 17 j 13:05	20° II 10'34	
min. Earth dist.	-3187 Dec 19 j 05:34	3° II 19'04	29.05388 AU	opposition	-3179 Jan 02 j 14:50	18° II 48'17	0°08'02
				min. Earth dist.	-3179 Jan 03 j 11:31	18° II 46'50	29.12911 AU

Attention, astronomical year style is used: The year -3179 in astronomical counting style is the year 3180 BCE in historical counting style.

direct	-3179 Mar 24 j 00:55	17°II22'56		max. Earth dist.	-3172 Jul 23 j 16:19	5°☾15'22	31.18401 AU
max. Earth dist.	-3179 Jul 08 j 06:48	19°II53'03	31.13270 AU	retrograde	-3172 Nov 04 j 00:15	7°☾44'36	
				opposition	-3171 Jan 20 j 04:32	6°☾22'37	0°49'10
conjunction	-3179 Jul 09 j 05:59	19°II55'13	0°10'04	min. Earth dist.	-3171 Jan 21 j 02:21	6°☾21'06	29.18931 AU
minimum elong	-3179 Jul 09 j 05:59	19°II55'13	0°10'11	direct	-3171 Apr 11 j 04:11	4°☾57'16	
behind sun begin	-3179 Jul 09 j 00:47	19°II54'45		max. Earth dist.	-3171 Jul 26 j 04:37	7°☾27'04	31.19368 AU
behind sun end	-3179 Jul 09 j 11:11	19°II55'40					
retrograde	-3179 Oct 19 j 23:44	22°II22'52		conjunction	-3171 Jul 27 j 04:44	7°☾29'18	0°48'22
opposition	-3178 Jan 05 j 01:21	21°II00'37	0°13'18	minimum elong	-3171 Jul 27 j 04:44	7°☾29'18	0°48'29
min. Earth dist.	-3178 Jan 05 j 21:43	20°II59'12	29.13648 AU	retrograde	-3171 Nov 06 j 09:33	9°☾56'11	
direct	-3178 Mar 26 j 13:04	19°II35'14		opposition	-3170 Jan 22 j 15:30	8°☾34'17	0°54'03
				min. Earth dist.	-3170 Jan 23 j 14:33	8°☾32'41	29.19898 AU
conjunction	-3178 Jul 11 j 18:25	22°II07'28	0°15'00	direct	-3170 Apr 13 j 15:16	7°☾09'00	
minimum elong	-3178 Jul 11 j 18:25	22°II07'28	0°15'05				
behind sun begin	-3178 Jul 11 j 16:17	22°II07'17		conjunction	-3170 Jul 29 j 16:10	9°☾41'01	0°52'54
behind sun end	-3178 Jul 11 j 20:33	22°II07'40		minimum elong	-3170 Jul 29 j 16:10	9°☾41'01	0°53'00
max. Earth dist.	-3178 Jul 10 j 18:44	22°II05'16	31.13955 AU	max. Earth dist.	-3170 Jul 28 j 15:19	9°☾38'42	31.20315 AU
retrograde	-3178 Oct 22 j 08:57	24°II35'00		retrograde	-3170 Nov 08 j 20:17	12°☾07'52	
opposition	-3177 Jan 07 j 12:09	23°II12'46	0°18'34	opposition	-3169 Jan 25 j 02:32	10°☾46'02	0°58'52
min. Earth dist.	-3177 Jan 08 j 09:59	23°II11'14	29.14306 AU	min. Earth dist.	-3169 Jan 26 j 00:51	10°☾44'29	29.20810 AU
direct	-3177 Mar 29 j 00:41	21°II47'21		direct	-3169 Apr 16 j 02:56	9°☾20'48	
max. Earth dist.	-3177 Jul 13 j 06:42	24°II17'19	31.14589 AU	max. Earth dist.	-3169 Jul 31 j 02:29	11°☾50'27	31.21169 AU
conjunction	-3177 Jul 14 j 06:29	24°II19'32	0°19'53	conjunction	-3169 Aug 01 j 03:29	11°☾52'47	0°57'22
minimum elong	-3177 Jul 14 j 06:29	24°II19'32	0°20'00	minimum elong	-3169 Aug 01 j 03:28	11°☾52'47	0°57'28
retrograde	-3177 Oct 24 j 19:10	26°II46'55		retrograde	-3169 Nov 11 j 05:21	14°☾19'36	
opposition	-3176 Jan 09 j 22:49	25°II24'42	0°23'47	opposition	-3168 Jan 27 j 13:45	12°☾57'48	1°03'35
min. Earth dist.	-3176 Jan 10 j 20:23	25°II23'12	29.14921 AU	min. Earth dist.	-3168 Jan 28 j 13:17	12°☾56'11	29.21625 AU
direct	-3176 Mar 30 j 14:19	23°II59'15		direct	-3168 Apr 17 j 14:02	11°☾32'37	
conjunction	-3176 Jul 15 j 18:27	26°II31'23	0°24'45	conjunction	-3168 Aug 02 j 14:50	14°☾04'34	1°01'44
minimum elong	-3176 Jul 15 j 18:27	26°II31'23	0°24'51	minimum elong	-3168 Aug 02 j 14:50	14°☾04'34	1°01'49
max. Earth dist.	-3176 Jul 14 j 17:50	26°II29'06	31.15202 AU	max. Earth dist.	-3168 Aug 01 j 13:48	14°☾02'13	31.21917 AU
retrograde	-3176 Oct 26 j 05:51	28°II58'39		retrograde	-3168 Nov 12 j 15:11	16°☾31'19	
opposition	-3175 Jan 11 j 09:23	27°II36'26	0°28'58	opposition	-3167 Jan 29 j 00:45	15°☾09'33	1°08'12
min. Earth dist.	-3175 Jan 12 j 07:34	27°II34'54	29.15563 AU	min. Earth dist.	-3167 Jan 30 j 00:05	15°☾07'57	29.22302 AU
direct	-3175 Apr 02 j 01:28	26°II10'58		direct	-3167 Apr 20 j 02:29	13°☾44'22	
max. Earth dist.	-3175 Jul 17 j 06:30	28°II40'50	31.15864 AU	max. Earth dist.	-3167 Aug 04 j 00:09	16°☾13'51	31.22521 AU
conjunction	-3175 Jul 18 j 06:24	28°II43'04	0°29'35	conjunction	-3167 Aug 05 j 02:08	16°☾16'16	1°06'01
minimum elong	-3175 Jul 18 j 06:24	28°II43'04	0°29'42	minimum elong	-3167 Aug 05 j 02:08	16°☾16'16	1°06'07
	-3175 Aug 23 j 08:48	0°☾		retrograde	-3167 Nov 15 j 02:07	18°☾42'58	
retrograde	-3175 Oct 28 j 15:57	1°☾10'12		opposition	-3166 Jan 31 j 12:00	17°☾21'13	1°12'44
	-3174 Jan 06 j 15:16	30°RII		min. Earth dist.	-3166 Feb 01 j 11:55	17°☾19'34	29.22856 AU
opposition	-3174 Jan 13 j 20:10	29°II48'02	0°34'06	direct	-3166 Apr 22 j 12:57	15°☾56'02	
min. Earth dist.	-3174 Jan 14 j 18:24	29°II46'29	29.16258 AU				
direct	-3174 Apr 04 j 15:08	28°II22'34		conjunction	-3166 Aug 07 j 13:17	18°☾27'51	1°10'12
	-3174 Jun 25 j 18:01	0°☾		minimum elong	-3166 Aug 07 j 13:17	18°☾27'51	1°10'17
				max. Earth dist.	-3166 Aug 06 j 12:01	18°☾25'30	31.23006 AU
conjunction	-3174 Jul 20 j 18:01	0°☾54'37	0°34'21	retrograde	-3166 Nov 17 j 12:02	20°☾54'29	
minimum elong	-3174 Jul 20 j 18:01	0°☾54'37	0°34'27	opposition	-3165 Feb 02 j 23:18	19°☾32'43	1°17'08
max. Earth dist.	-3174 Jul 19 j 17:01	0°☾52'17	31.16605 AU	min. Earth dist.	-3165 Feb 03 j 23:25	19°☾31'04	29.23283 AU
retrograde	-3174 Oct 31 j 04:08	3°☾21'40		direct	-3165 Apr 25 j 03:02	18°☾07'32	
opposition	-3173 Jan 16 j 06:54	1°☾59'32	0°39'11	max. Earth dist.	-3165 Aug 08 j 21:46	20°☾36'48	31.23390 AU
min. Earth dist.	-3173 Jan 17 j 04:45	1°☾58'01	29.17062 AU				
direct	-3173 Apr 07 j 03:40	0°☾34'05		conjunction	-3165 Aug 10 j 00:12	20°☾39'16	1°14'16
max. Earth dist.	-3173 Jul 22 j 05:53	3°☾03'55	31.17457 AU	minimum elong	-3165 Aug 10 j 00:12	20°☾39'16	1°14'23
				retrograde	-3165 Nov 20 j 00:12	23°☾05'49	
conjunction	-3173 Jul 23 j 05:44	3°☾06'08	0°39'05	opposition	-3164 Feb 05 j 10:27	21°☾44'02	1°21'26
minimum elong	-3173 Jul 23 j 05:44	3°☾06'08	0°39'12	min. Earth dist.	-3164 Feb 06 j 10:14	21°☾42'24	29.23649 AU
retrograde	-3173 Nov 02 j 13:24	5°☾33'07		direct	-3164 Apr 26 j 15:41	20°☾18'49	
opposition	-3172 Jan 18 j 17:47	4°☾11'02	0°44'12	max. Earth dist.	-3164 Aug 10 j 09:48	22°☾48'06	31.23725 AU
min. Earth dist.	-3172 Jan 19 j 16:21	4°☾09'29	29.17963 AU				
direct	-3172 Apr 08 j 16:16	2°☾45'39		conjunction	-3164 Aug 11 j 11:04	22°☾50'28	1°18'14
				minimum elong	-3164 Aug 11 j 11:04	22°☾50'28	1°18'20
conjunction	-3172 Jul 24 j 17:08	5°☾17'40	0°43'45	retrograde	-3164 Nov 21 j 08:59	25°☾16'56	
minimum elong	-3172 Jul 24 j 17:08	5°☾17'40	0°43'51	opposition	-3163 Feb 06 j 21:46	23°☾55'07	1°25'37

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Attention, astronomical year style is used: The year -3163 in astronomical counting style is the year 3164 BCE in historical counting style.

min. Earth dist.	-3163 Feb 07 j 22:15	23° 5 53'26	29.23975 AU	min. Earth dist.	-3155 Feb 25 j 15:03	11° 0 19'55	29.28458 AU
direct	-3163 Apr 29 j 04:35	22° 5 29'53		direct	-3155 May 17 j 02:21	9° 0 56'32	
				max. Earth dist.	-3155 Aug 30 j 09:46	12° 0 25'31	31.28518 AU
conjunction	-3163 Aug 13 j 21:39	25° 5 01'25	1°22'05				
minimum elong	-3163 Aug 13 j 21:38	25° 5 01'25	1°22'12	conjunction	-3155 Aug 31 j 08:00	12° 0 27'36	1°48'10
max. Earth dist.	-3163 Aug 12 j 19:43	24° 5 59'00	31.24059 AU	minimum elong	-3155 Aug 31 j 08:00	12° 0 27'36	1°48'16
retrograde	-3163 Nov 23 j 19:48	27° 5 27'50		retrograde	-3155 Dec 11 j 05:10	14° 0 54'06	
opposition	-3162 Feb 09 j 08:56	26° 5 05'59	1°29'40	opposition	-3154 Feb 27 j 05:34	13° 0 32'24	1°56'57
min. Earth dist.	-3162 Feb 10 j 08:14	26° 5 04'23	29.24340 AU	min. Earth dist.	-3154 Feb 28 j 03:41	13° 0 30'54	29.28815 AU
direct	-3162 May 01 j 17:31	24° 5 40'44		direct	-3154 May 19 j 14:35	12° 0 07'37	
max. Earth dist.	-3162 Aug 15 j 07:33	27° 5 09'53	31.24450 AU				
				conjunction	-3154 Sep 02 j 18:03	14° 0 38'35	1°50'47
conjunction	-3162 Aug 16 j 08:16	27° 5 12'12	1°25'49	minimum elong	-3154 Sep 02 j 18:03	14° 0 38'35	1°50'51
minimum elong	-3162 Aug 16 j 08:16	27° 5 12'12	1°25'54	max. Earth dist.	-3154 Sep 01 j 19:07	14° 0 36'26	31.28812 AU
retrograde	-3162 Nov 26 j 05:11	29° 5 38'33			-3154 Sep 12 j 06:44	15° 0	
opposition	-3161 Feb 11 j 20:25	28° 5 16'42	1°33'35	retrograde	-3154 Dec 13 j 16:47	17° 0 05'07	
min. Earth dist.	-3161 Feb 12 j 20:15	28° 5 15'04	29.24790 AU	opposition	-3153 Mar 01 j 17:27	15° 0 43'25	1°59'39
direct	-3161 May 04 j 05:43	26° 5 51'29		min. Earth dist.	-3153 Mar 02 j 14:24	15° 0 41'59	29.29048 AU
					-3153 Mar 29 j 15:04	15° 0 41'59	
conjunction	-3161 Aug 18 j 18:31	29° 5 22'50	1°29'25	direct	-3153 May 22 j 03:37	14° 0 18'39	
minimum elong	-3161 Aug 18 j 18:31	29° 5 22'50	1°29'31		-3153 Jul 12 j 14:49	15° 0	
max. Earth dist.	-3161 Aug 17 j 17:53	29° 5 20'32	31.24954 AU	max. Earth dist.	-3153 Sep 04 j 06:03	16° 0 47'29	31.28975 AU
	-3161 Sep 04 j 11:41	0° 0					
retrograde	-3161 Nov 28 j 15:11	1° 0 49'10		conjunction	-3153 Sep 05 j 04:01	16° 0 49'33	1°53'13
opposition	-3160 Feb 14 j 07:43	0° 0 27'20	1°37'22	minimum elong	-3153 Sep 05 j 04:01	16° 0 49'33	1°53'18
min. Earth dist.	-3160 Feb 15 j 06:04	0° 0 25'48	29.25344 AU	retrograde	-3153 Dec 16 j 02:59	19° 0 16'05	
	-3160 Mar 02 j 05:34	30° 0 45'25		opposition	-3152 Mar 03 j 05:29	17° 0 54'21	2°02'10
direct	-3160 May 05 j 18:07	29° 5 02'08		min. Earth dist.	-3152 Mar 04 j 03:12	17° 0 52'52	29.29164 AU
	-3160 Jul 06 j 06:51	0° 0		direct	-3152 May 23 j 16:20	16° 0 29'37	
max. Earth dist.	-3160 Aug 19 j 04:45	1° 0 31'11	31.25550 AU				
				conjunction	-3152 Sep 06 j 13:52	19° 0 00'24	1°55'31
conjunction	-3160 Aug 20 j 04:55	1° 0 33'27	1°32'54	minimum elong	-3152 Sep 06 j 13:52	19° 0 00'24	1°55'34
minimum elong	-3160 Aug 20 j 04:55	1° 0 33'27	1°32'58	max. Earth dist.	-3152 Sep 05 j 15:55	18° 0 58'20	31.29049 AU
retrograde	-3160 Nov 30 j 00:08	3° 0 59'47		retrograde	-3152 Dec 17 j 12:54	21° 0 26'57	
opposition	-3159 Feb 15 j 19:02	2° 0 37'58	1°41'00	opposition	-3151 Mar 05 j 17:13	20° 0 05'10	2°04'31
min. Earth dist.	-3159 Feb 16 j 17:55	2° 0 36'24	29.25993 AU	min. Earth dist.	-3151 Mar 06 j 13:35	20° 0 03'47	29.29202 AU
direct	-3159 May 08 j 04:27	1° 0 12'50		direct	-3151 May 26 j 05:24	18° 0 40'26	
conjunction	-3159 Aug 22 j 15:15	3° 0 44'06	1°36'14	conjunction	-3151 Sep 08 j 23:38	21° 0 11'07	1°57'38
minimum elong	-3159 Aug 22 j 15:15	3° 0 44'06	1°36'20	minimum elong	-3151 Sep 08 j 23:38	21° 0 11'07	1°57'42
max. Earth dist.	-3159 Aug 21 j 15:51	3° 0 41'54	31.26226 AU	max. Earth dist.	-3151 Sep 08 j 02:09	21° 0 09'06	31.29065 AU
retrograde	-3159 Dec 02 j 09:42	6° 0 10'27		retrograde	-3151 Dec 19 j 21:42	23° 0 37'42	
opposition	-3158 Feb 18 j 06:32	4° 0 48'40	1°44'30	opposition	-3150 Mar 08 j 05:19	22° 0 15'52	2°06'42
min. Earth dist.	-3158 Feb 19 j 04:34	4° 0 47'10	29.26675 AU	min. Earth dist.	-3150 Mar 09 j 01:58	22° 0 14'28	29.29232 AU
direct	-3158 May 10 j 16:12	3° 0 23'37		direct	-3150 May 28 j 16:22	20° 0 51'09	
max. Earth dist.	-3158 Aug 24 j 01:43	5° 0 52'37	31.26903 AU				
				conjunction	-3150 Sep 11 j 09:11	23° 0 21'43	1°59'35
conjunction	-3158 Aug 25 j 01:22	5° 0 54'50	1°39'26	minimum elong	-3150 Sep 11 j 09:10	23° 0 21'43	1°59'38
minimum elong	-3158 Aug 25 j 01:22	5° 0 54'50	1°39'31	max. Earth dist.	-3150 Sep 10 j 12:57	23° 0 19'49	31.29108 AU
retrograde	-3158 Dec 04 j 20:55	8° 0 21'14		retrograde	-3150 Dec 22 j 06:34	25° 0 48'19	
opposition	-3157 Feb 20 j 18:13	6° 0 59'29	1°47'51	opposition	-3149 Mar 10 j 17:23	24° 0 26'27	2°08'42
min. Earth dist.	-3157 Feb 21 j 16:15	6° 0 57'59	29.27354 AU	min. Earth dist.	-3149 Mar 11 j 12:41	24° 0 25'08	29.29299 AU
direct	-3157 May 13 j 01:52	5° 0 34'31		direct	-3149 May 31 j 04:28	23° 0 01'46	
conjunction	-3157 Aug 27 j 11:40	8° 0 05'40	1°42'30	conjunction	-3149 Sep 13 j 18:41	25° 0 32'13	2°01'21
minimum elong	-3157 Aug 27 j 11:39	8° 0 05'40	1°42'36	minimum elong	-3149 Sep 13 j 18:41	25° 0 32'13	2°01'25
max. Earth dist.	-3157 Aug 26 j 13:12	8° 0 03'34	31.27546 AU	max. Earth dist.	-3149 Sep 12 j 22:34	25° 0 30'19	31.29212 AU
retrograde	-3157 Dec 07 j 07:01	10° 0 32'06		retrograde	-3149 Dec 24 j 17:34	27° 0 58'52	
opposition	-3156 Feb 23 j 05:52	9° 0 10'24	1°51'03	opposition	-3148 Mar 12 j 05:19	26° 0 36'58	2°10'30
min. Earth dist.	-3156 Feb 24 j 03:52	9° 0 08'54	29.27957 AU	min. Earth dist.	-3148 Mar 13 j 00:04	26° 0 35'42	29.29462 AU
direct	-3156 May 14 j 14:48	7° 0 45'30		direct	-3148 Jun 01 j 14:08	25° 0 12'20	
				max. Earth dist.	-3148 Sep 14 j 09:55	27° 0 40'58	31.29414 AU
conjunction	-3156 Aug 28 j 21:46	10° 0 16'36	1°45'25	conjunction	-3148 Sep 15 j 04:17	27° 0 42'42	2°02'58
minimum elong	-3156 Aug 28 j 21:46	10° 0 16'36	1°45'29	minimum elong	-3148 Sep 15 j 04:17	27° 0 42'42	2°03'01
max. Earth dist.	-3156 Aug 27 j 22:21	10° 0 14'25	31.28096 AU		-3148 Dec 02 j 16:19	0° 0 09'25	
retrograde	-3156 Dec 08 j 19:39	12° 0 43'05		retrograde	-3148 Dec 26 j 03:07	0° 0 09'25	
opposition	-3155 Feb 24 j 17:37	11° 0 21'23	1°54'04				

Attention, astronomical year style is used: The year -3147 in astronomical counting style is the year 3148 BCE in historical counting style.

	-3147 Jan 19 j 04:39	30° $\mathring{R}\Omega$		retrograde	-3139 Jan 12 j 18:33	17° $\mathring{M}36'12$	
opposition	-3147 Mar 14 j 17:27	28° $\mathring{Q}47'30$	2°12'08	opposition	-3139 Apr 01 j 21:00	16° $\mathring{M}14'03$	2°18'08
min. Earth dist.	-3147 Mar 15 j 11:30	28° $\mathring{Q}46'17$	29.29695 AU	min. Earth dist.	-3139 Apr 02 j 10:38	16° $\mathring{M}13'08$	29.29860 AU
direct	-3147 Jun 04 j 02:35	27° $\mathring{Q}22'56$		direct	-3139 Jun 22 j 00:27	14° $\mathring{M}49'56$	
conjunction	-3147 Sep 17 j 13:36	29° $\mathring{Q}53'13$	2°04'23	conjunction	-3139 Oct 04 j 16:44	17° $\mathring{M}19'28$	2°09'16
minimum elong	-3147 Sep 17 j 13:36	29° $\mathring{Q}53'13$	2°04'27	minimum elong	-3139 Oct 04 j 16:44	17° $\mathring{M}19'28$	2°09'19
max. Earth dist.	-3147 Sep 16 j 18:59	29° $\mathring{Q}51'28$	31.29683 AU	max. Earth dist.	-3139 Oct 04 j 03:49	17° $\mathring{M}18'15$	31.29462 AU
	-3147 Sep 20 j 13:41	0° \mathring{M}		retrograde	-3138 Jan 15 j 03:45	19° $\mathring{M}46'58$	
retrograde	-3147 Dec 28 j 15:32	2° $\mathring{M}20'01$		opposition	-3138 Apr 04 j 09:43	18° $\mathring{M}24'44$	2°18'00
opposition	-3146 Mar 17 j 05:36	0° $\mathring{M}58'06$	2°13'33	min. Earth dist.	-3138 Apr 04 j 22:39	18° $\mathring{M}23'52$	29.29373 AU
min. Earth dist.	-3146 Mar 17 j 22:24	0° $\mathring{M}56'58$	29.29992 AU	direct	-3138 Jun 24 j 13:02	17° $\mathring{M}00'38$	
	-3146 Apr 25 j 14:38	30° $\mathring{R}\Omega$					
direct	-3146 Jun 06 j 12:41	29° $\mathring{Q}33'36$		conjunction	-3138 Oct 07 j 01:47	19° $\mathring{M}30'02$	2°09'04
	-3146 Jul 17 j 06:56	0° \mathring{M}		minimum elong	-3138 Oct 07 j 01:47	19° $\mathring{M}30'02$	2°09'05
				max. Earth dist.	-3138 Oct 06 j 12:42	19° $\mathring{M}28'48$	31.28977 AU
conjunction	-3146 Sep 19 j 23:08	2° $\mathring{M}03'49$	2°05'38	retrograde	-3137 Jan 17 j 15:53	21° $\mathring{M}57'38$	
minimum elong	-3146 Sep 19 j 23:08	2° $\mathring{M}03'49$	2°05'41	opposition	-3137 Apr 06 j 22:19	20° $\mathring{M}35'19$	2°17'41
max. Earth dist.	-3146 Sep 19 j 06:16	2° $\mathring{M}02'14$	31.29986 AU	min. Earth dist.	-3137 Apr 07 j 09:46	20° $\mathring{M}34'32$	29.28905 AU
retrograde	-3146 Dec 31 j 01:28	4° $\mathring{M}30'43$		direct	-3137 Jun 26 j 22:56	19° $\mathring{M}11'14$	
opposition	-3145 Mar 19 j 17:58	3° $\mathring{M}08'48$	2°14'48				
min. Earth dist.	-3145 Mar 20 j 10:56	3° $\mathring{M}07'39$	29.30291 AU	conjunction	-3137 Oct 09 j 10:52	21° $\mathring{M}40'32$	2°08'40
direct	-3145 Jun 08 j 23:52	1° $\mathring{M}44'24$		minimum elong	-3137 Oct 09 j 10:52	21° $\mathring{M}40'32$	2°08'41
				max. Earth dist.	-3137 Oct 08 j 23:46	21° $\mathring{M}39'29$	31.28523 AU
conjunction	-3145 Sep 22 j 08:25	4° $\mathring{M}14'32$	2°06'42	retrograde	-3136 Jan 20 j 01:46	24° $\mathring{M}08'14$	
minimum elong	-3145 Sep 22 j 08:25	4° $\mathring{M}14'32$	2°06'46	opposition	-3136 Apr 08 j 11:01	22° $\mathring{M}45'51$	2°17'10
max. Earth dist.	-3145 Sep 21 j 15:25	4° $\mathring{M}12'56$	31.30272 AU	min. Earth dist.	-3136 Apr 08 j 22:14	22° $\mathring{M}45'05$	29.28481 AU
retrograde	-3144 Jan 02 j 13:56	6° $\mathring{M}41'31$		direct	-3136 Jun 28 j 10:05	21° $\mathring{M}21'48$	
opposition	-3144 Mar 21 j 06:14	5° $\mathring{M}19'36$	2°15'50				
min. Earth dist.	-3144 Mar 21 j 21:44	5° $\mathring{M}18'33$	29.30544 AU	conjunction	-3136 Oct 10 j 19:50	23° $\mathring{M}51'00$	2°08'05
direct	-3144 Jun 10 j 12:34	3° $\mathring{M}55'17$		minimum elong	-3136 Oct 10 j 19:50	23° $\mathring{M}51'00$	2°08'05
				max. Earth dist.	-3136 Oct 10 j 09:06	23° $\mathring{M}50'00$	31.28148 AU
conjunction	-3144 Sep 23 j 17:55	6° $\mathring{M}25'21$	2°07'36	retrograde	-3135 Jan 21 j 14:18	26° $\mathring{M}18'49$	
minimum elong	-3144 Sep 23 j 17:55	6° $\mathring{M}25'21$	2°07'37	opposition	-3135 Apr 10 j 23:33	24° $\mathring{M}56'23$	2°16'27
max. Earth dist.	-3144 Sep 23 j 01:58	6° $\mathring{M}23'51$	31.30467 AU	min. Earth dist.	-3135 Apr 11 j 08:42	24° $\mathring{M}55'46$	29.28144 AU
retrograde	-3143 Jan 04 j 01:08	8° $\mathring{M}52'26$		direct	-3135 Jun 30 j 22:16	23° $\mathring{M}32'25$	
opposition	-3143 Mar 23 j 18:40	7° $\mathring{M}30'29$	2°16'41				
min. Earth dist.	-3143 Mar 24 j 10:45	7° $\mathring{M}29'24$	29.30690 AU	conjunction	-3135 Oct 13 j 04:55	26° $\mathring{M}01'33$	2°07'19
direct	-3143 Jun 13 j 00:48	6° $\mathring{M}06'14$		minimum elong	-3135 Oct 13 j 04:55	26° $\mathring{M}01'33$	2°07'20
max. Earth dist.	-3143 Sep 25 j 11:42	8° $\mathring{M}34'44$	31.30555 AU	max. Earth dist.	-3135 Oct 12 j 19:40	26° $\mathring{M}00'41$	31.27850 AU
				retrograde	-3134 Jan 24 j 02:16	28° $\mathring{M}29'30$	
conjunction	-3143 Sep 26 j 03:23	8° $\mathring{M}36'13$	2°08'18	opposition	-3134 Apr 13 j 12:25	27° $\mathring{M}07'02$	2°15'32
minimum elong	-3143 Sep 26 j 03:23	8° $\mathring{M}36'13$	2°08'20	min. Earth dist.	-3134 Apr 13 j 21:29	27° $\mathring{M}06'25$	29.27884 AU
retrograde	-3142 Jan 06 j 11:51	11° $\mathring{M}03'23$		direct	-3134 Jul 03 j 09:45	25° $\mathring{M}43'09$	
opposition	-3142 Mar 26 j 07:12	9° $\mathring{M}41'26$	2°17'21				
min. Earth dist.	-3142 Mar 26 j 21:47	9° $\mathring{M}40'26$	29.30702 AU	conjunction	-3134 Oct 15 j 13:49	28° $\mathring{M}12'13$	2°06'22
direct	-3142 Jun 15 j 13:44	8° $\mathring{M}17'13$		minimum elong	-3134 Oct 15 j 13:49	28° $\mathring{M}12'13$	2°06'22
				max. Earth dist.	-3134 Oct 15 j 05:37	28° $\mathring{M}11'26$	31.27629 AU
conjunction	-3142 Sep 28 j 12:43	10° $\mathring{M}47'07$	2°08'49		-3134 Dec 07 j 17:54	0° \mathring{Q}	
minimum elong	-3142 Sep 28 j 12:43	10° $\mathring{M}47'07$	2°08'50	retrograde	-3133 Jan 26 j 13:21	0° $\mathring{Q}40'19$	
max. Earth dist.	-3142 Sep 27 j 21:16	10° $\mathring{M}45'39$	31.30486 AU		-3133 Mar 19 j 16:48	30° $\mathring{R}\mathring{M}$	
retrograde	-3141 Jan 08 j 21:52	13° $\mathring{M}14'22$		opposition	-3133 Apr 16 j 01:09	29° $\mathring{M}17'50$	2°14'25
opposition	-3141 Mar 28 j 19:54	11° $\mathring{M}52'22$	2°17'48	min. Earth dist.	-3133 Apr 16 j 08:12	29° $\mathring{M}17'21$	29.27665 AU
min. Earth dist.	-3141 Mar 29 j 10:52	11° $\mathring{M}51'21$	29.30565 AU	direct	-3133 Jul 05 j 22:04	27° $\mathring{M}54'02$	
direct	-3141 Jun 18 j 01:06	10° $\mathring{M}28'13$			-3133 Oct 07 j 18:26	0° \mathring{Q}	
conjunction	-3141 Sep 30 j 22:11	12° $\mathring{M}57'59$	2°09'09	conjunction	-3133 Oct 17 j 22:52	0° $\mathring{Q}23'02$	2°05'14
minimum elong	-3141 Sep 30 j 22:12	12° $\mathring{M}57'59$	2°09'11	minimum elong	-3133 Oct 17 j 22:52	0° $\mathring{Q}23'02$	2°05'14
max. Earth dist.	-3141 Sep 30 j 07:49	12° $\mathring{M}56'38$	31.30274 AU	max. Earth dist.	-3133 Oct 17 j 15:11	0° $\mathring{Q}22'18$	31.27414 AU
retrograde	-3140 Jan 11 j 07:18	15° $\mathring{M}25'19$		retrograde	-3132 Jan 29 j 00:13	2° $\mathring{Q}51'17$	
opposition	-3140 Mar 30 j 08:21	14° $\mathring{M}03'15$	2°18'04	opposition	-3132 Apr 17 j 13:55	1° $\mathring{Q}28'47$	2°13'06
min. Earth dist.	-3140 Mar 30 j 22:20	14° $\mathring{M}02'18$	29.30269 AU	min. Earth dist.	-3132 Apr 17 j 21:01	1° $\mathring{Q}28'18$	29.27447 AU
direct	-3140 Jun 19 j 14:00	12° $\mathring{M}39'07$		direct	-3132 Jul 07 j 09:16	0° $\mathring{Q}05'04$	
conjunction	-3140 Oct 02 j 07:30	15° $\mathring{M}08'47$	2°09'18	conjunction	-3132 Oct 19 j 08:01	2° $\mathring{Q}34'01$	2°03'55
minimum elong	-3140 Oct 02 j 07:30	15° $\mathring{M}08'47$	2°09'20	minimum elong	-3132 Oct 19 j 08:01	2° $\mathring{Q}34'01$	2°03'54
max. Earth dist.	-3140 Oct 01 j 16:49	15° $\mathring{M}07'24$	31.29915 AU	max. Earth dist.	-3132 Oct 19 j 01:53	2° $\mathring{Q}33'26$	31.27177 AU

Attention, astronomical year style is used: The year -3131 in astronomical counting style is the year 3132 BCE in historical counting style.

retrograde	-3131 Jan 30 j 10:35	5° 02 '25		direct	-3123 Jul 27 j 16:46	19° 04 '52	9
opposition	-3131 Apr 20 j 02:49	3° 03 '54	2°11'36				
min. Earth dist.	-3131 Apr 20 j 08:36	3° 03 '30	29.27163 AU	conjunction	-3123 Nov 07 j 17:52	22° 01 '31	1°44'23
direct	-3131 Jul 09 j 22:19	2° 01 '16		minimum elong	-3123 Nov 07 j 17:52	22° 01 '31	1°44'21
				max. Earth dist.	-3123 Nov 07 j 19:44	22° 01 '42	31.21142 AU
conjunction	-3131 Oct 21 j 17:00	4° 04 '08	2°02'25	retrograde	-3122 Feb 19 j 16:43	24° 04 '05	
minimum elong	-3131 Oct 21 j 17:00	4° 04 '08	2°02'25	opposition	-3122 May 10 j 23:53	23° 01 '48	1°49'57
max. Earth dist.	-3131 Oct 21 j 10:45	4° 04 '33	31.26854 AU	min. Earth dist.	-3122 May 10 j 21:21	23° 01 '58	29.20936 AU
retrograde	-3130 Feb 01 j 22:29	7° 01 '43		direct	-3122 Jul 30 j 05:54	21° 05 '25	
opposition	-3130 Apr 22 j 15:53	5° 05 '09	2°09'54				
min. Earth dist.	-3130 Apr 22 j 21:11	5° 05 '47	29.26794 AU	conjunction	-3122 Nov 10 j 02:53	24° 02 '23	1°41'25
direct	-3130 Jul 12 j 08:41	4° 02 '35		minimum elong	-3122 Nov 10 j 02:53	24° 02 '23	1°41'23
				max. Earth dist.	-3122 Nov 10 j 04:58	24° 02 '35	31.20567 AU
conjunction	-3130 Oct 24 j 02:18	6° 05 '22	2°00'44	retrograde	-3121 Feb 22 j 04:49	26° 05 '07	
minimum elong	-3130 Oct 24 j 02:19	6° 05 '22	2°00'43	opposition	-3121 May 13 j 12:50	25° 03 '47	1°46'42
max. Earth dist.	-3130 Oct 23 j 21:44	6° 05 '56	31.26422 AU	min. Earth dist.	-3121 May 13 j 09:28	25° 03 '01	29.20406 AU
retrograde	-3129 Feb 04 j 07:43	9° 02 '50		direct	-3121 Aug 01 j 15:51	24° 00 '28	
opposition	-3129 Apr 25 j 04:53	8° 02 '28	2°08'01				
min. Earth dist.	-3129 Apr 25 j 09:37	8° 02 '09	29.26287 AU	conjunction	-3121 Nov 12 j 12:05	26° 03 '52	1°38'18
direct	-3129 Jul 14 j 20:53	6° 03 '57		minimum elong	-3121 Nov 12 j 12:05	26° 03 '52	1°38'16
				max. Earth dist.	-3121 Nov 12 j 16:16	26° 03 '47	31.20068 AU
conjunction	-3129 Oct 26 j 11:25	9° 07 '38	1°58'54	retrograde	-3120 Feb 24 j 14:34	29° 05 '18	
minimum elong	-3129 Oct 26 j 11:26	9° 07 '38	1°58'53	opposition	-3120 May 15 j 01:53	27° 04 '56	1°43'17
max. Earth dist.	-3129 Oct 26 j 06:24	9° 07 '10	31.25855 AU	min. Earth dist.	-3120 May 14 j 21:33	27° 04 '14	29.19912 AU
retrograde	-3128 Feb 06 j 20:02	11° 03 '29		direct	-3120 Aug 03 j 03:56	26° 01 '43	
opposition	-3128 Apr 26 j 17:53	10° 01 '47	2°05'58				
min. Earth dist.	-3128 Apr 26 j 21:27	10° 01 '33	29.25646 AU	conjunction	-3120 Nov 13 j 21:08	28° 04 '35	1°35'02
direct	-3128 Jul 16 j 06:41	8° 05 '18		minimum elong	-3120 Nov 13 j 21:08	28° 04 '35	1°34'59
				max. Earth dist.	-3120 Nov 14 j 01:18	28° 04 '59	31.19593 AU
conjunction	-3128 Oct 27 j 20:41	11° 01 '53	1°56'53		-3120 Dec 17 j 13:51	0° 00 ' 00	
minimum elong	-3128 Oct 27 j 20:41	11° 01 '53	1°56'51	retrograde	-3119 Feb 26 j 03:24	1° 00 '16'42	
max. Earth dist.	-3128 Oct 27 j 17:09	11° 01 '83	31.25140 AU		-3119 May 13 j 11:38	30° 00 ' 00	
retrograde	-3127 Feb 08 j 06:11	13° 04 '51		opposition	-3119 May 17 j 14:57	29° 05 '18	1°39'43
opposition	-3127 Apr 29 j 06:56	12° 02 '50	2°03'43	min. Earth dist.	-3119 May 17 j 09:12	29° 05 '41	29.19431 AU
min. Earth dist.	-3127 Apr 29 j 10:35	12° 02 '48	29.24862 AU	direct	-3119 Aug 05 j 13:31	28° 03 '09	
direct	-3127 Jul 18 j 18:14	11° 01 '34			-3119 Oct 21 j 02:03	0° 00 ' 00	
				conjunction	-3119 Nov 16 j 06:30	0° 00 '58'00	1°31'37
conjunction	-3127 Oct 30 j 05:46	13° 03 '02	1°54'42	minimum elong	-3119 Nov 16 j 06:30	0° 00 '58'00	1°31'35
minimum elong	-3127 Oct 30 j 05:46	13° 03 '02	1°54'41	max. Earth dist.	-3119 Nov 16 j 12:20	0° 00 '58'33	31.19095 AU
max. Earth dist.	-3127 Oct 30 j 02:30	13° 02 '43	31.24326 AU	retrograde	-3118 Feb 28 j 14:22	3° 00 '28'18	
retrograde	-3126 Feb 10 j 18:55	15° 05 '07		opposition	-3118 May 20 j 04:12	2° 00 '04'53	1°36'00
opposition	-3126 May 01 j 19:55	14° 03 '61	2°01'19	min. Earth dist.	-3118 May 19 j 22:26	2° 00 '05'16	29.18901 AU
min. Earth dist.	-3126 May 01 j 21:46	14° 03 '04	29.24006 AU	direct	-3118 Aug 08 j 00:27	0° 00 '41'49	
direct	-3126 Jul 21 j 05:59	13° 01 '24					
				conjunction	-3118 Nov 18 j 15:50	3° 00 '09'36	1°28'05
conjunction	-3126 Nov 01 j 14:47	15° 04 '03	1°52'22	minimum elong	-3118 Nov 18 j 15:51	3° 00 '09'36	1°28'01
minimum elong	-3126 Nov 01 j 14:47	15° 04 '03	1°52'19	max. Earth dist.	-3118 Nov 18 j 22:00	3° 00 '10'11	31.18539 AU
max. Earth dist.	-3126 Nov 01 j 12:45	15° 04 '05	31.23450 AU	retrograde	-3117 Mar 03 j 03:51	5° 00 '40'06	
retrograde	-3125 Feb 13 j 06:42	18° 01 '14		opposition	-3117 May 22 j 17:20	4° 00 '16'39	1°32'09
opposition	-3125 May 04 j 09:02	16° 04 '71	1°58'43	min. Earth dist.	-3117 May 22 j 09:58	4° 00 '17'09	29.18286 AU
min. Earth dist.	-3125 May 04 j 10:55	16° 04 '70	29.23130 AU	direct	-3117 Aug 10 j 11:19	2° 00 '53'38	
direct	-3125 Jul 23 j 16:56	15° 02 '34					
				conjunction	-3117 Nov 21 j 01:24	5° 00 '21'24	1°24'24
conjunction	-3125 Nov 03 j 23:51	17° 05 '51	1°49'52	minimum elong	-3117 Nov 21 j 01:24	5° 00 '21'24	1°24'21
minimum elong	-3125 Nov 03 j 23:51	17° 05 '51	1°49'50	max. Earth dist.	-3117 Nov 21 j 08:14	5° 00 '22'03	31.17857 AU
max. Earth dist.	-3125 Nov 03 j 23:00	17° 05 '51	31.22599 AU	retrograde	-3116 Mar 04 j 16:21	7° 00 '52'04	
retrograde	-3124 Feb 15 j 17:55	20° 02 '11		opposition	-3116 May 24 j 06:31	6° 00 '28'33	1°28'09
opposition	-3124 May 05 j 21:46	18° 05 '58	1°55'58	min. Earth dist.	-3116 May 23 j 23:36	6° 00 '29'01	29.17539 AU
min. Earth dist.	-3124 May 05 j 21:28	18° 05 '58	29.22300 AU	direct	-3116 Aug 11 j 21:17	5° 00 '05'35	
direct	-3124 Jul 25 j 05:17	17° 03 '36					
				conjunction	-3116 Nov 22 j 11:02	7° 00 '33'19	1°20'37
conjunction	-3124 Nov 05 j 08:51	20° 02 '44	1°47'12	minimum elong	-3116 Nov 22 j 11:02	7° 00 '33'19	1°20'32
minimum elong	-3124 Nov 05 j 08:51	20° 02 '44	1°47'09	max. Earth dist.	-3116 Nov 22 j 18:43	7° 00 '34'02	31.17056 AU
max. Earth dist.	-3124 Nov 05 j 08:38	20° 02 '42	31.21813 AU	retrograde	-3115 Mar 07 j 04:49	10° 00 '04'08	
retrograde	-3123 Feb 17 j 05:44	22° 03 '20		opposition	-3115 May 26 j 19:43	8° 00 '40'33	1°24'02
opposition	-3123 May 08 j 10:52	21° 08 '55	1°53'03	min. Earth dist.	-3115 May 26 j 11:04	8° 00 '41'08	29.16658 AU
min. Earth dist.	-3123 May 08 j 10:10	21° 08 '58	29.21569 AU				

Attention, astronomical year style is used: The year -3115 in astronomical counting style is the year 3116 BCE in historical counting style.

direct	-3115 Aug 14 j 09:31	7°M17'36		direct	-3107 Sep 01 j 03:04	24°M53'34	
conjunction	-3115 Nov 24 j 20:29	9°M45'15	1°16'42	conjunction	-3107 Dec 12 j 02:06	27°M20'51	0°41'52
minimum elong	-3115 Nov 24 j 20:29	9°M45'15	1°16'39	minimum elong	-3107 Dec 12 j 02:06	27°M20'51	0°41'47
max. Earth dist.	-3115 Nov 25 j 04:13	9°M45'59	31.16119 AU	max. Earth dist.	-3107 Dec 12 j 18:07	27°M22'22	31.09339 AU
retrograde	-3114 Mar 09 j 18:02	12°M16'13		retrograde	-3106 Mar 27 j 17:52	29°M53'00	
opposition	-3114 May 29 j 09:03	10°M52'32	1°19'47	opposition	-3106 Jun 16 j 17:17	28°M28'47	0°42'10
min. Earth dist.	-3114 May 29 j 00:34	10°M53'07	29.15672 AU	min. Earth dist.	-3106 Jun 16 j 00:37	28°M29'55	29.09035 AU
direct	-3114 Aug 16 j 21:15	9°M29'36		direct	-3106 Sep 03 j 14:53	27°M06'02	
conjunction	-3114 Nov 27 j 06:10	11°M57'11	1°12'41	conjunction	-3106 Dec 14 j 12:14	29°M33'19	0°37'08
minimum elong	-3114 Nov 27 j 06:10	11°M57'11	1°12'36	minimum elong	-3106 Dec 14 j 12:14	29°M33'19	0°37'03
max. Earth dist.	-3114 Nov 27 j 15:37	11°M58'04	31.15104 AU	max. Earth dist.	-3106 Dec 15 j 04:08	29°M34'49	31.08669 AU
retrograde	-3113 Mar 12 j 06:08	14°M28'16			-3106 Dec 26 j 06:53	0°Z	
opposition	-3113 May 31 j 22:01	13°M04'29	1°15'26	retrograde	-3105 Mar 30 j 07:56	2°Z05'38	
min. Earth dist.	-3113 May 31 j 12:09	13°M05'09	29.14625 AU	opposition	-3105 Jun 19 j 06:19	0°Z41'22	0°37'05
direct	-3113 Aug 19 j 10:42	11°M41'32		min. Earth dist.	-3105 Jun 18 j 14:05	0°Z42'28	29.08337 AU
conjunction	-3113 Nov 29 j 15:39	14°M09'02	1°08'33		-3105 Jul 15 j 18:01	30°RM	
minimum elong	-3113 Nov 29 j 15:40	14°M09'02	1°08'29	direct	-3105 Sep 06 j 01:25	29°M18'39	
max. Earth dist.	-3113 Nov 30 j 01:00	14°M09'55	31.14060 AU		-3105 Oct 26 j 01:26	0°Z	
	-3113 Dec 22 j 11:19	15°M		conjunction	-3105 Dec 16 j 22:39	1°Z45'56	0°32'22
retrograde	-3112 Mar 13 j 18:10	16°M40'15		minimum elong	-3105 Dec 16 j 22:39	1°Z45'56	0°32'17
opposition	-3112 Jun 02 j 11:06	15°M16'22	1°10'58	max. Earth dist.	-3105 Dec 17 j 15:58	1°Z47'34	31.07923 AU
min. Earth dist.	-3112 Jun 02 j 00:37	15°M17'04	29.13599 AU	retrograde	-3104 Mar 31 j 20:57	4°Z18'24	
	-3112 Jun 12 j 14:06	15°RM		opposition	-3104 Jun 20 j 19:21	2°Z54'06	0°31'57
direct	-3112 Aug 20 j 21:03	13°M53'25		min. Earth dist.	-3104 Jun 20 j 02:05	2°Z55'16	29.07525 AU
	-3112 Oct 24 j 11:15	15°M		direct	-3104 Sep 07 j 14:09	1°Z31'24	
conjunction	-3112 Dec 01 j 01:13	16°M20'51	1°04'20	conjunction	-3104 Dec 18 j 08:53	3°Z58'41	0°27'32
minimum elong	-3112 Dec 01 j 01:13	16°M20'51	1°04'14	minimum elong	-3104 Dec 18 j 08:53	3°Z58'41	0°27'26
max. Earth dist.	-3112 Dec 01 j 12:39	16°M21'56	31.13056 AU	max. Earth dist.	-3104 Dec 19 j 01:36	4°Z00'15	31.07052 AU
retrograde	-3111 Mar 16 j 04:00	18°M52'11		retrograde	-3103 Apr 03 j 10:26	6°Z31'18	
opposition	-3111 Jun 05 j 00:10	17°M28'13	1°06'24	opposition	-3103 Jun 23 j 08:34	5°Z06'55	0°26'45
min. Earth dist.	-3111 Jun 04 j 12:37	17°M29'00	29.12629 AU	min. Earth dist.	-3103 Jun 22 j 15:16	5°Z08'06	29.06592 AU
direct	-3111 Aug 23 j 10:07	16°M05'16		direct	-3103 Sep 10 j 00:39	3°Z44'13	
conjunction	-3111 Dec 03 j 10:48	18°M32'39	1°00'00	conjunction	-3103 Dec 20 j 19:29	6°Z11'29	0°22'40
minimum elong	-3111 Dec 03 j 10:49	18°M32'39	0°59'56	minimum elong	-3103 Dec 20 j 19:29	6°Z11'29	0°22'35
max. Earth dist.	-3111 Dec 03 j 22:21	18°M33'45	31.12148 AU	max. Earth dist.	-3103 Dec 21 j 13:35	6°Z13'12	31.06050 AU
retrograde	-3110 Mar 18 j 17:17	21°M04'09		retrograde	-3102 Apr 05 j 22:07	8°Z44'13	
opposition	-3110 Jun 07 j 13:09	19°M40'05	1°01'44	opposition	-3102 Jun 25 j 21:36	7°Z19'46	0°21'32
min. Earth dist.	-3110 Jun 07 j 00:04	19°M40'59	29.11775 AU	min. Earth dist.	-3102 Jun 25 j 03:55	7°Z20'58	29.05524 AU
direct	-3110 Aug 25 j 20:29	18°M17'10		direct	-3102 Sep 12 j 13:58	5°Z57'03	
conjunction	-3110 Dec 05 j 20:31	20°M44'30	0°55'36	conjunction	-3102 Dec 23 j 05:58	8°Z24'17	0°17'46
minimum elong	-3110 Dec 05 j 20:31	20°M44'30	0°55'30	minimum elong	-3102 Dec 23 j 05:58	8°Z24'17	0°17'40
max. Earth dist.	-3110 Dec 06 j 09:48	20°M45'46	31.11339 AU	max. Earth dist.	-3102 Dec 23 j 23:35	8°Z25'57	31.04943 AU
retrograde	-3109 Mar 21 j 03:40	23°M16'09		retrograde	-3101 Apr 08 j 12:10	10°Z57'08	
opposition	-3109 Jun 10 j 02:12	21°M52'03	0°56'58	opposition	-3101 Jun 28 j 10:33	9°Z32'35	0°16'17
min. Earth dist.	-3109 Jun 09 j 12:51	21°M52'57	29.11008 AU	min. Earth dist.	-3101 Jun 27 j 16:03	9°Z33'51	29.04378 AU
direct	-3109 Aug 28 j 07:41	20°M29'10		direct	-3101 Sep 15 j 01:09	8°Z09'51	
conjunction	-3109 Dec 08 j 06:17	22°M56'28	0°51'06	conjunction	-3101 Dec 25 j 16:31	10°Z37'03	0°12'51
minimum elong	-3109 Dec 08 j 06:17	22°M56'28	0°51'01	minimum elong	-3101 Dec 25 j 16:31	10°Z37'03	0°12'45
max. Earth dist.	-3109 Dec 08 j 20:12	22°M57'47	31.10628 AU	behind sun begin	-3101 Dec 25 j 12:26	10°Z36'41	
retrograde	-3108 Mar 22 j 16:18	25°M28'16		behind sun end	-3101 Dec 25 j 20:37	10°Z37'25	
opposition	-3108 Jun 11 j 15:03	24°M04'07	0°52'07	max. Earth dist.	-3101 Dec 26 j 11:20	10°Z38'50	31.03765 AU
min. Earth dist.	-3108 Jun 10 j 23:54	24°M05'09	29.10324 AU	retrograde	-3100 Apr 09 j 22:29	13°Z10'01	
direct	-3108 Aug 29 j 17:54	22°M41'17		opposition	-3100 Jun 29 j 23:25	11°Z45'22	0°11'00
conjunction	-3108 Dec 09 j 16:09	25°M08'34	0°46'31	min. Earth dist.	-3100 Jun 29 j 05:02	11°Z46'38	29.03197 AU
minimum elong	-3108 Dec 09 j 16:09	25°M08'34	0°46'25	direct	-3100 Sep 16 j 12:51	10°Z22'36	
max. Earth dist.	-3108 Dec 10 j 06:58	25°M09'58	31.09967 AU	conjunction	-3100 Dec 27 j 03:05	12°Z49'47	0°07'56
retrograde	-3107 Mar 25 j 04:33	27°M40'33		minimum elong	-3100 Dec 27 j 03:05	12°Z49'47	0°07'49
opposition	-3107 Jun 14 j 04:14	26°M16'22	0°47'11	behind sun begin	-3100 Dec 26 j 21:17	12°Z49'15	
min. Earth dist.	-3107 Jun 13 j 13:18	26°M17'23	29.09682 AU	behind sun end	-3100 Dec 27 j 08:53	12°Z50'18	

Attention, astronomical year style is used: The year -3100 in astronomical counting style is the year 3101 BCE in historical counting style.

max. Earth dist.	-3100 Dec 27 j 22:23	12° \mathring{A} 51'36	31.02611 AU	retrograde	-3092 Apr 28 j 09:38	0° \mathring{B} 55'27	
retrograde	-3099 Apr 12 j 11:03	15° \mathring{A} 22'51			-3092 Jun 29 j 23:10	30° \mathring{R} \mathring{A}	
opposition	-3099 Jul 02 j 12:13	13° \mathring{A} 58'07	0°05'42	min. Earth dist.	-3092 Jul 17 j 05:40	29° \mathring{A} 32'05	28.96571 AU
min. Earth dist.	-3099 Jul 01 j 16:15	13° \mathring{A} 59'29	29.02074 AU	opposition	-3092 Jul 18 j 04:51	29° \mathring{A} 30'29	0°-31'-15
direct	-3099 Sep 18 j 23:36	12° \mathring{A} 35'19		direct	-3092 Oct 04 j 04:33	28° \mathring{A} 07'44	
					-3092 Dec 29 j 03:39	0° \mathring{B}	
conjunction	-3099 Dec 29 j 13:37	15° \mathring{A} 02'30	0°02'59				
minimum elong	-3099 Dec 29 j 13:37	15° \mathring{A} 02'30	0°02'53	conjunction	-3091 Jan 13 j 19:05	0° \mathring{B} 35'14	0°-31'-36
behind sun begin	-3099 Dec 29 j 07:12	15° \mathring{A} 01'55		minimum elong	-3091 Jan 13 j 19:05	0° \mathring{B} 35'14	0°31'44
behind sun end	-3099 Dec 29 j 20:02	15° \mathring{A} 03'05		max. Earth dist.	-3091 Jan 14 j 19:02	0° \mathring{B} 37'30	30.96149 AU
max. Earth dist.	-3099 Dec 30 j 09:39	15° \mathring{A} 04'23	31.01518 AU	retrograde	-3091 Apr 30 j 21:03	3° \mathring{B} 09'21	
retrograde	-3098 Apr 14 j 22:55	17° \mathring{A} 35'42		opposition	-3091 Jul 20 j 17:34	1° \mathring{B} 44'21	0°-36'-25
min. Earth dist.	-3098 Jul 04 j 05:27	16° \mathring{A} 12'15	29.01037 AU	min. Earth dist.	-3091 Jul 19 j 18:58	1° \mathring{B} 45'55	28.95786 AU
opposition	-3098 Jul 05 j 01:06	16° \mathring{A} 10'54	0°00'24	direct	-3091 Oct 06 j 16:15	0° \mathring{B} 21'35	
desc. node	-3098 Aug 01 j 17:07	15° \mathring{A} 27'34					
direct	-3098 Sep 21 j 08:50	14° \mathring{A} 48'05		conjunction	-3090 Jan 16 j 06:44	2° \mathring{B} 49'06	0°-36'-25
				minimum elong	-3090 Jan 16 j 06:44	2° \mathring{B} 49'06	0°36'32
conjunction	-3097 Jan 01 j 00:27	17° \mathring{A} 15'16	0°-2'-6	max. Earth dist.	-3090 Jan 17 j 06:29	2° \mathring{B} 51'21	30.95320 AU
minimum elong	-3097 Jan 01 j 00:26	17° \mathring{A} 15'16	0°02'13	retrograde	-3090 May 03 j 10:38	5° \mathring{B} 23'18	
behind sun begin	-3098 Dec 31 j 18:00	17° \mathring{A} 14'41		min. Earth dist.	-3090 Jul 22 j 06:44	3° \mathring{B} 59'52	28.94903 AU
behind sun end	-3097 Jan 01 j 06:52	17° \mathring{A} 15'51		opposition	-3090 Jul 23 j 06:10	3° \mathring{B} 58'15	0°-41'-32
max. Earth dist.	-3097 Jan 01 j 21:38	17° \mathring{A} 17'16	31.00540 AU	direct	-3090 Oct 09 j 03:52	2° \mathring{B} 35'27	
retrograde	-3097 Apr 17 j 11:56	19° \mathring{A} 48'35					
opposition	-3097 Jul 07 j 13:35	18° \mathring{A} 23'44	0°-4'-53	conjunction	-3089 Jan 18 j 18:30	5° \mathring{B} 03'00	0°-41'-10
min. Earth dist.	-3097 Jul 06 j 16:11	18° \mathring{A} 25'13	29.00112 AU	minimum elong	-3089 Jan 18 j 18:30	5° \mathring{B} 03'00	0°41'17
direct	-3097 Sep 23 j 20:28	17° \mathring{A} 00'55		max. Earth dist.	-3089 Jan 19 j 18:09	5° \mathring{B} 05'14	30.94377 AU
				retrograde	-3089 May 05 j 22:47	7° \mathring{B} 37'15	
conjunction	-3096 Jan 03 j 11:09	19° \mathring{A} 28'09	0°-7'-3	opposition	-3089 Jul 25 j 18:38	6° \mathring{B} 12'08	0°-46'-35
minimum elong	-3096 Jan 03 j 11:09	19° \mathring{A} 28'09	0°07'10	min. Earth dist.	-3089 Jul 24 j 20:17	6° \mathring{B} 13'40	28.93928 AU
behind sun begin	-3096 Jan 03 j 05:12	19° \mathring{A} 27'36		direct	-3089 Oct 11 j 13:59	4° \mathring{B} 49'16	
behind sun end	-3096 Jan 03 j 17:06	19° \mathring{A} 28'41					
max. Earth dist.	-3096 Jan 04 j 08:17	19° \mathring{A} 30'08	30.99667 AU	conjunction	-3088 Jan 21 j 06:19	7° \mathring{B} 16'49	0°-45'-52
retrograde	-3096 Apr 19 j 01:50	22° \mathring{A} 01'36		minimum elong	-3088 Jan 21 j 06:19	7° \mathring{B} 16'49	0°45'59
min. Earth dist.	-3096 Jul 08 j 05:10	20° \mathring{A} 38'10	28.99302 AU	max. Earth dist.	-3088 Jan 22 j 06:34	7° \mathring{B} 19'06	30.93385 AU
opposition	-3096 Jul 09 j 02:21	20° \mathring{A} 36'43	0°-10'-12	retrograde	-3088 May 07 j 10:58	9° \mathring{B} 51'07	
direct	-3096 Sep 25 j 06:21	19° \mathring{A} 13'54		min. Earth dist.	-3088 Jul 26 j 07:28	8° \mathring{B} 27'33	28.92925 AU
				opposition	-3088 Jul 27 j 07:00	8° \mathring{B} 25'55	0°-51'-34
conjunction	-3095 Jan 04 j 22:00	21° \mathring{A} 41'11	0°-12'00	direct	-3088 Oct 13 j 02:08	7° \mathring{B} 02'59	
minimum elong	-3095 Jan 04 j 22:00	21° \mathring{A} 41'11	0°12'07				
behind sun begin	-3095 Jan 04 j 17:36	21° \mathring{A} 40'47		conjunction	-3087 Jan 22 j 17:54	9° \mathring{B} 30'33	0°-50'-30
behind sun end	-3095 Jan 05 j 02:24	21° \mathring{A} 41'34		minimum elong	-3087 Jan 22 j 17:53	9° \mathring{B} 30'33	0°50'37
max. Earth dist.	-3095 Jan 05 j 20:53	21° \mathring{A} 43'20	30.98906 AU	max. Earth dist.	-3087 Jan 23 j 17:40	9° \mathring{B} 32'47	30.92383 AU
retrograde	-3095 Apr 21 j 14:58	24° \mathring{A} 14'46		retrograde	-3087 May 09 j 23:29	12° \mathring{B} 04'54	
opposition	-3095 Jul 11 j 15:00	22° \mathring{A} 49'52	0°-15'-30	opposition	-3087 Jul 29 j 19:28	10° \mathring{B} 39'37	0°-56'-29
min. Earth dist.	-3095 Jul 10 j 16:32	22° \mathring{A} 51'25	28.98578 AU	min. Earth dist.	-3087 Jul 28 j 20:34	10° \mathring{B} 41'12	28.91960 AU
direct	-3095 Sep 27 j 18:13	21° \mathring{A} 27'04		direct	-3087 Oct 15 j 11:56	9° \mathring{B} 16'36	
conjunction	-3094 Jan 07 j 08:57	23° \mathring{A} 54'24	0°-16'-56	conjunction	-3086 Jan 25 j 05:52	11° \mathring{B} 44'12	0°-55'-3
minimum elong	-3094 Jan 07 j 08:56	23° \mathring{A} 54'24	0°17'02	minimum elong	-3086 Jan 25 j 05:52	11° \mathring{B} 44'12	0°55'09
max. Earth dist.	-3094 Jan 08 j 07:23	23° \mathring{A} 56'31	30.98219 AU	max. Earth dist.	-3086 Jan 26 j 07:01	11° \mathring{B} 46'34	30.91450 AU
retrograde	-3094 Apr 24 j 05:16	26° \mathring{A} 28'08		retrograde	-3086 May 12 j 12:02	14° \mathring{B} 18'35	
min. Earth dist.	-3094 Jul 13 j 05:12	25° \mathring{A} 04'45	28.97924 AU	min. Earth dist.	-3086 Jul 31 j 07:43	12° \mathring{B} 54'54	28.91077 AU
opposition	-3094 Jul 14 j 03:38	25° \mathring{A} 03'13	0°-20'-46	opposition	-3086 Aug 01 j 07:34	12° \mathring{B} 53'14	-1°-1'-18
direct	-3094 Sep 30 j 04:04	23° \mathring{A} 40'26		direct	-3086 Oct 17 j 23:36	11° \mathring{B} 30'10	
conjunction	-3093 Jan 09 j 20:15	26° \mathring{A} 07'49	0°-21'-51	conjunction	-3085 Jan 27 j 17:45	13° \mathring{B} 57'49	0°-59'-31
minimum elong	-3093 Jan 09 j 20:15	26° \mathring{A} 07'49	0°21'59	minimum elong	-3085 Jan 27 j 17:45	13° \mathring{B} 57'49	0°59'38
max. Earth dist.	-3093 Jan 10 j 20:07	26° \mathring{A} 10'05	30.97565 AU	max. Earth dist.	-3085 Jan 28 j 18:13	14° \mathring{B} 00'07	30.90621 AU
retrograde	-3093 Apr 26 j 18:43	28° \mathring{A} 41'42		retrograde	-3085 May 15 j 02:14	16° \mathring{B} 32'16	
opposition	-3093 Jul 16 j 16:15	27° \mathring{A} 16'46	0°-26'-2	opposition	-3085 Aug 03 j 19:49	15° \mathring{B} 06'52	-1°-6'-2
min. Earth dist.	-3093 Jul 15 j 17:34	27° \mathring{A} 18'19	28.97264 AU	min. Earth dist.	-3085 Aug 02 j 20:05	15° \mathring{B} 08'31	28.90325 AU
direct	-3093 Oct 02 j 17:21	25° \mathring{A} 54'00		direct	-3085 Oct 20 j 09:46	13° \mathring{B} 43'45	
conjunction	-3092 Jan 12 j 07:30	28° \mathring{A} 21'27	0°-26'-45	conjunction	-3084 Jan 30 j 05:45	16° \mathring{B} 11'27	-1°-3'-54
minimum elong	-3092 Jan 12 j 07:30	28° \mathring{A} 21'27	0°26'52	minimum elong	-3084 Jan 30 j 05:45	16° \mathring{B} 11'27	1°04'00
max. Earth dist.	-3092 Jan 13 j 06:44	28° \mathring{A} 23'39	30.96893 AU	max. Earth dist.	-3084 Jan 31 j 07:39	16° \mathring{B} 13'54	30.89921 AU
	-3092 Feb 28 j 09:48	0° \mathring{B}		retrograde	-3084 May 16 j 15:26	18° \mathring{B} 45'58	

Attention, astronomical year style is used: The year -3084 in astronomical counting style is the year 3085 BCE in historical counting style.

min. Earth dist.	-3084 Aug 04 j 07:50	17° $\overline{22}$ '13	28.89696 AU	min. Earth dist.	-3076 Aug 22 j 09:53	5° \approx 17'46	28.86237 AU
opposition	-3084 Aug 05 j 07:56	17° $\overline{20}$ '32	-1°-10'-41	opposition	-3076 Aug 23 j 08:13	5° \approx 16'12	-1°-43'-29
direct	-3084 Oct 21 j 22:33	15° $\overline{57}$ '25		direct	-3076 Nov 08 j 13:52	3° \approx 52'56	
conjunction	-3083 Jan 31 j 17:49	18° $\overline{25}$ '11	-1°-8'-11	conjunction	-3075 Feb 19 j 00:01	6° \approx 21'26	-1°-38'-23
minimum elong	-3083 Jan 31 j 17:49	18° $\overline{25}$ '11	1°08'18	minimum elong	-3075 Feb 19 j 00:01	6° \approx 21'26	1°38'29
max. Earth dist.	-3083 Feb 01 j 19:07	18° $\overline{27}$ '34	30.89368 AU	max. Earth dist.	-3075 Feb 20 j 00:43	6° \approx 23'46	30.85809 AU
retrograde	-3083 May 19 j 06:15	20° $\overline{59}$ '46		retrograde	-3075 Jun 06 j 15:22	8° \approx 56'23	
opposition	-3083 Aug 07 j 20:04	19° $\overline{34}$ '21	-1°-15'-13	opposition	-3075 Aug 25 j 19:57	7° \approx 30'59	-1°-46'-57
min. Earth dist.	-3083 Aug 06 j 19:23	19° $\overline{36}$ '04	28.89218 AU	min. Earth dist.	-3075 Aug 24 j 21:53	7° \approx 32'32	28.85616 AU
direct	-3083 Oct 24 j 09:24	18° $\overline{11}$ '13		direct	-3075 Nov 11 j 02:49	6° \approx 07'38	
conjunction	-3082 Feb 03 j 06:05	20° $\overline{39}$ '04	-1°-12'-23	conjunction	-3074 Feb 21 j 13:10	8° \approx 36'12	-1°-41'-32
minimum elong	-3082 Feb 03 j 06:05	20° $\overline{39}$ '04	1°12'29	minimum elong	-3074 Feb 21 j 13:09	8° \approx 36'12	1°41'39
max. Earth dist.	-3082 Feb 04 j 08:17	20° $\overline{41}$ '33	30.88933 AU	max. Earth dist.	-3074 Feb 22 j 12:38	8° \approx 38'25	30.85210 AU
retrograde	-3082 May 21 j 18:47	23° $\overline{13}$ '44		retrograde	-3074 Jun 09 j 05:37	11° \approx 11'08	
min. Earth dist.	-3082 Aug 09 j 08:03	21° $\overline{50}$ '01	28.88833 AU	min. Earth dist.	-3074 Aug 27 j 09:33	9° \approx 47'14	28.85055 AU
opposition	-3082 Aug 10 j 08:12	21° $\overline{48}$ '20	-1°-19'-38	opposition	-3074 Aug 28 j 07:40	9° \approx 45'41	-1°-50'-15
direct	-3082 Oct 26 j 20:56	20° $\overline{25}$ '13		direct	-3074 Nov 13 j 13:57	8° \approx 22'15	
conjunction	-3081 Feb 05 j 18:33	22° $\overline{53}$ '10	-1°-16'-28	conjunction	-3073 Feb 24 j 02:27	10° \approx 50'54	-1°-44'-33
minimum elong	-3081 Feb 05 j 18:33	22° $\overline{53}$ '10	1°16'35	minimum elong	-3073 Feb 24 j 02:27	10° \approx 50'54	1°44'39
max. Earth dist.	-3081 Feb 06 j 20:32	22° $\overline{55}$ '38	30.88590 AU	max. Earth dist.	-3073 Feb 25 j 02:26	10° \approx 53'09	30.84671 AU
retrograde	-3081 May 24 j 09:38	25° $\overline{27}$ '55		retrograde	-3073 Jun 11 j 18:20	13° \approx 25'48	
opposition	-3081 Aug 12 j 20:07	24° $\overline{02}$ '33	-1°-23'-57	opposition	-3073 Aug 30 j 19:14	12° \approx 00'20	-1°-53'-23
min. Earth dist.	-3081 Aug 11 j 19:14	24° $\overline{04}$ '17	28.88517 AU	min. Earth dist.	-3073 Aug 29 j 21:52	12° \approx 01'50	28.84575 AU
direct	-3081 Oct 29 j 08:24	22° $\overline{39}$ '26		direct	-3073 Nov 16 j 02:08	10° \approx 36'50	
conjunction	-3080 Feb 08 j 07:06	25° $\overline{07}$ '31	-1°-20'-26	conjunction	-3072 Feb 26 j 15:42	13° \approx 05'33	-1°-47'-24
minimum elong	-3080 Feb 08 j 07:05	25° $\overline{07}$ '31	1°20'33	minimum elong	-3072 Feb 26 j 15:42	13° \approx 05'33	1°47'29
max. Earth dist.	-3080 Feb 09 j 08:58	25° $\overline{09}$ '57	30.88271 AU	max. Earth dist.	-3072 Feb 27 j 15:13	13° \approx 07'46	30.84258 AU
retrograde	-3080 May 25 j 22:34	27° $\overline{42}$ '21			-3072 Apr 23 j 16:34	15° \approx	
min. Earth dist.	-3080 Aug 13 j 08:37	26° $\overline{18}$ '39	28.88206 AU	retrograde	-3072 Jun 13 j 09:37	15° \approx 40'25	
opposition	-3080 Aug 14 j 08:15	26° $\overline{17}$ '00	-1°-28'-8		-3072 Aug 04 j 03:33	15° \approx	
direct	-3080 Oct 30 j 18:19	24° $\overline{53}$ '55		min. Earth dist.	-3072 Aug 31 j 08:42	14° \approx 16'30	28.84233 AU
conjunction	-3079 Feb 09 j 19:48	27° $\overline{22}$ '05	-1°-24'-17	opposition	-3072 Sep 01 j 06:46	14° \approx 14'56	-1°-56'-20
minimum elong	-3079 Feb 09 j 19:48	27° $\overline{22}$ '05	1°24'24	direct	-3072 Nov 17 j 14:47	12° \approx 51'24	
max. Earth dist.	-3079 Feb 10 j 21:53	27° $\overline{24}$ '33	30.87943 AU		-3071 Feb 19 j 05:27	15° \approx	
retrograde	-3079 May 28 j 11:23	29° $\overline{56}$ '59		conjunction	-3071 Feb 28 j 04:57	15° \approx 20'12	-1°-50'-5
opposition	-3079 Aug 16 j 20:16	28° $\overline{31}$ '40	-1°-32'-11	minimum elong	-3071 Feb 28 j 04:57	15° \approx 20'12	1°50'10
min. Earth dist.	-3079 Aug 15 j 19:59	28° $\overline{33}$ '22	28.87846 AU	max. Earth dist.	-3071 Mar 01 j 04:24	15° \approx 22'24	30.83971 AU
direct	-3079 Nov 02 j 06:20	27° $\overline{08}$ '34		retrograde	-3071 Jun 15 j 21:56	17° \approx 55'04	
conjunction	-3078 Feb 12 j 08:45	29° $\overline{36}$ '51	-1°-28'-1	opposition	-3071 Sep 03 j 18:24	16° \approx 29'35	-1°-59'-7
minimum elong	-3078 Feb 12 j 08:44	29° $\overline{36}$ '51	1°28'07	min. Earth dist.	-3071 Sep 02 j 21:31	16° \approx 31'03	28.84022 AU
max. Earth dist.	-3078 Feb 13 j 09:35	29° $\overline{39}$ '11	30.87530 AU	direct	-3071 Nov 20 j 01:47	15° \approx 06'00	
retrograde	-3078 Feb 22 j 15:10	0° \approx		conjunction	-3070 Mar 02 j 18:30	17° \approx 34'53	-1°-52'-36
min. Earth dist.	-3078 May 31 j 00:08	2° \approx 11'48		minimum elong	-3070 Mar 02 j 18:30	17° \approx 34'53	1°52'41
opposition	-3078 Aug 18 j 09:24	0° \approx 48'05	28.87398 AU	max. Earth dist.	-3070 Mar 03 j 18:04	17° \approx 37'06	30.83827 AU
direct	-3078 Aug 19 j 08:19	0° \approx 46'29	-1°-36'-6	retrograde	-3070 Jun 18 j 11:15	20° \approx 09'43	
	-3078 Sep 17 j 16:24	30° \overline{R} $\overline{3}$		min. Earth dist.	-3070 Sep 05 j 08:08	18° \approx 45'48	28.83935 AU
	-3078 Nov 04 j 15:44	29° $\overline{23}$ '20		opposition	-3070 Sep 06 j 05:43	18° \approx 44'17	-2°-1'-43
	-3078 Dec 21 j 06:01	0° \approx		direct	-3070 Nov 22 j 13:51	17° \approx 20'41	
conjunction	-3077 Feb 14 j 21:55	1° \approx 51'43	-1°-31'-37	conjunction	-3069 Mar 05 j 08:02	19° \approx 49'40	-1°-54'-57
minimum elong	-3077 Feb 14 j 21:55	1° \approx 51'43	1°31'43	minimum elong	-3069 Mar 05 j 08:02	19° \approx 49'40	1°55'02
max. Earth dist.	-3077 Feb 15 j 23:14	1° \approx 54'06	30.87027 AU	max. Earth dist.	-3069 Mar 06 j 06:33	19° \approx 51'47	30.83785 AU
retrograde	-3077 Jun 02 j 12:59	4° \approx 26'41		retrograde	-3069 Jun 21 j 00:28	22° \approx 24'30	
opposition	-3077 Aug 21 j 20:14	3° \approx 01'21	-1°-39'-52	opposition	-3069 Sep 08 j 17:18	20° \approx 59'06	-2°-4'-8
min. Earth dist.	-3077 Aug 20 j 21:04	3° \approx 02'58	28.86844 AU	min. Earth dist.	-3069 Sep 07 j 20:58	21° \approx 00'32	28.83944 AU
direct	-3077 Nov 07 j 03:13	1° \approx 38'09		direct	-3069 Nov 24 j 23:28	19° \approx 35'29	
conjunction	-3076 Feb 17 j 10:49	4° \approx 06'36	-1°-35'-4	conjunction	-3068 Mar 06 j 21:41	22° \approx 04'36	-1°-57'-8
minimum elong	-3076 Feb 17 j 10:48	4° \approx 06'36	1°35'10	minimum elong	-3068 Mar 06 j 21:40	22° \approx 04'36	1°57'13
max. Earth dist.	-3076 Feb 18 j 10:42	4° \approx 08'51	30.86435 AU	max. Earth dist.	-3068 Mar 07 j 20:45	22° \approx 06'46	30.83820 AU
retrograde	-3076 Jun 04 j 02:34	6° \approx 41'34		retrograde	-3068 Jun 22 j 13:06	24° \approx 39'24	

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Attention, astronomical year style is used: The year -3068 in astronomical counting style is the year 3069 BCE in historical counting style.

min. Earth dist.	-3068 Sep 09 j 08:12	23° \approx 15'30	28.83989 AU	opposition	-3060 Sep 27 j 22:38	11° \times 14'39	-2°-17'-1
opposition	-3068 Sep 10 j 04:43	23° \approx 14'03	-2°-6'-22	min. Earth dist.	-3060 Sep 27 j 08:35	11° \times 15'38	28.82742 AU
direct	-3068 Nov 26 j 11:01	21° \approx 50'26		direct	-3060 Dec 14 j 09:05	9° \times 50'31	
conjunction	-3067 Mar 09 j 11:29	24° \approx 19'39	-1°-59'-7	conjunction	-3059 Mar 28 j 04:37	12° \times 20'29	-2°-8'-21
minimum elong	-3067 Mar 09 j 11:29	24° \approx 19'39	1°59'12	minimum elong	-3059 Mar 28 j 04:37	12° \times 20'29	2°08'23
max. Earth dist.	-3067 Mar 10 j 08:53	24° \approx 21'40	30.83864 AU	max. Earth dist.	-3059 Mar 28 j 20:58	12° \times 22'01	30.82584 AU
retrograde	-3067 Jun 25 j 02:06	26° \approx 54'28		retrograde	-3059 Jul 13 j 10:37	14° \times 54'39	
opposition	-3067 Sep 12 j 16:10	25° \approx 29'10	-2°-8'-24	opposition	-3059 Sep 30 j 09:25	13° \times 29'26	-2°-17'-25
min. Earth dist.	-3067 Sep 11 j 20:52	25° \approx 30'31	28.84027 AU	min. Earth dist.	-3059 Sep 29 j 19:07	13° \times 30'27	28.82782 AU
direct	-3067 Nov 28 j 21:15	24° \approx 05'30		direct	-3059 Dec 16 j 21:05	12° \times 05'16	
conjunction	-3066 Mar 12 j 01:39	26° \approx 34'51	-2°00'-56	conjunction	-3058 Mar 30 j 18:49	14° \times 35'19	-2°-8'-38
minimum elong	-3066 Mar 12 j 01:39	26° \approx 34'51	2°01'01	minimum elong	-3058 Mar 30 j 18:49	14° \times 35'19	2°08'41
max. Earth dist.	-3066 Mar 12 j 23:18	26° \approx 36'53	30.83858 AU	max. Earth dist.	-3058 Mar 31 j 09:34	14° \times 36'42	30.82700 AU
retrograde	-3066 Jun 27 j 14:21	29° \approx 09'37		retrograde	-3058 Jul 15 j 22:38	17° \times 09'25	
min. Earth dist.	-3066 Sep 14 j 09:06	27° \approx 45'40	28.83974 AU	opposition	-3058 Oct 02 j 20:22	15° \times 44'15	-2°-17'-37
opposition	-3066 Sep 15 j 03:38	27° \approx 44'22	-2°-10'-14	min. Earth dist.	-3058 Oct 02 j 07:01	15° \times 45'12	28.82979 AU
direct	-3066 Dec 01 j 09:28	26° \approx 20'40		direct	-3058 Dec 19 j 07:22	14° \times 20'02	
conjunction	-3065 Mar 14 j 15:42	28° \approx 50'07	-2°-2'-34	conjunction	-3057 Apr 02 j 09:07	16° \times 50'13	-2°-8'-43
minimum elong	-3065 Mar 14 j 15:42	28° \approx 50'07	2°02'37	minimum elong	-3057 Apr 02 j 09:07	16° \times 50'13	2°08'45
max. Earth dist.	-3065 Mar 15 j 11:20	28° \approx 51'58	30.83758 AU	max. Earth dist.	-3057 Apr 03 j 00:27	16° \times 51'39	30.82961 AU
	-3065 Apr 15 j 20:18	0° \times		retrograde	-3057 Jul 18 j 09:56	19° \times 24'13	
retrograde	-3065 Jun 30 j 04:36	1° \times 24'51		opposition	-3057 Oct 05 j 07:11	17° \times 59'08	-2°-17'-36
opposition	-3065 Sep 17 j 14:59	29° \approx 59'36	-2°-11'-52	min. Earth dist.	-3057 Oct 04 j 18:18	18° \times 00'03	28.83297 AU
min. Earth dist.	-3065 Sep 16 j 21:00	0° \times 00'52	28.83828 AU	direct	-3057 Dec 21 j 18:44	16° \times 34'54	
	-3065 Sep 17 j 09:16	30° \times		conjunction	-3056 Apr 03 j 23:20	19° \times 05'11	-2°-8'-36
direct	-3065 Dec 03 j 20:26	28° \approx 35'50		minimum elong	-3056 Apr 03 j 23:20	19° \times 05'11	2°08'39
	-3064 Feb 15 j 05:05	0° \times		max. Earth dist.	-3056 Apr 04 j 12:56	19° \times 06'27	30.83349 AU
conjunction	-3064 Mar 16 j 05:53	1° \times 05'24	-2°-4'00	retrograde	-3056 Jul 19 j 23:36	21° \times 39'07	
minimum elong	-3064 Mar 16 j 05:53	1° \times 05'23	2°04'04	opposition	-3056 Oct 06 j 17:57	20° \times 14'07	-2°-17'-23
max. Earth dist.	-3064 Mar 17 j 01:22	1° \times 07'13	30.83556 AU	min. Earth dist.	-3056 Oct 06 j 05:30	20° \times 15'00	28.83732 AU
retrograde	-3064 Jul 01 j 17:05	3° \times 40'02		direct	-3056 Dec 23 j 04:40	18° \times 49'51	
min. Earth dist.	-3064 Sep 18 j 09:43	2° \times 15'58	28.83588 AU	conjunction	-3055 Apr 06 j 13:49	21° \times 20'17	-2°-8'-18
opposition	-3064 Sep 19 j 02:21	2° \times 14'48	-2°-13'-18	minimum elong	-3055 Apr 06 j 13:49	21° \times 20'17	2°08'19
direct	-3064 Dec 05 j 08:57	0° \times 50'58		max. Earth dist.	-3055 Apr 07 j 03:27	21° \times 21'33	30.83804 AU
conjunction	-3063 Mar 18 j 19:57	3° \times 20'36	-2°-5'-15	retrograde	-3055 Jul 22 j 11:05	23° \times 54'08	
minimum elong	-3063 Mar 18 j 19:57	3° \times 20'36	2°05'19	opposition	-3055 Oct 09 j 04:49	22° \times 29'12	-2°-16'-56
max. Earth dist.	-3063 Mar 19 j 14:07	3° \times 22'18	30.83299 AU	min. Earth dist.	-3055 Oct 08 j 17:48	22° \times 29'59	28.84192 AU
retrograde	-3063 Jul 04 j 07:56	5° \times 55'09		direct	-3055 Dec 25 j 17:04	21° \times 04'56	
opposition	-3063 Sep 21 j 13:31	4° \times 29'54	-2°-14'-32	conjunction	-3054 Apr 09 j 04:23	23° \times 35'29	-2°-7'-47
min. Earth dist.	-3063 Sep 20 j 20:51	4° \times 31'05	28.83312 AU	minimum elong	-3054 Apr 09 j 04:23	23° \times 35'29	2°07'49
direct	-3063 Dec 07 j 22:12	3° \times 05'59		max. Earth dist.	-3054 Apr 09 j 16:15	23° \times 36'35	30.84266 AU
conjunction	-3062 Mar 21 j 10:10	5° \times 35'42	-2°-6'-19	retrograde	-3054 Jul 25 j 01:15	26° \times 09'14	
minimum elong	-3062 Mar 21 j 10:10	5° \times 35'42	2°06'23	opposition	-3054 Oct 11 j 15:30	24° \times 44'23	-2°-16'-17
max. Earth dist.	-3062 Mar 22 j 03:44	5° \times 37'21	30.83010 AU	min. Earth dist.	-3054 Oct 11 j 04:43	24° \times 45'09	28.84630 AU
retrograde	-3062 Jul 06 j 19:50	8° \times 10'10		direct	-3054 Dec 28 j 06:03	23° \times 20'04	
min. Earth dist.	-3062 Sep 23 j 09:39	6° \times 45'58	28.83039 AU	conjunction	-3053 Apr 11 j 19:02	25° \times 50'44	-2°-7'-5
opposition	-3062 Sep 24 j 00:35	6° \times 44'54	-2°-15'-34	minimum elong	-3053 Apr 11 j 19:02	25° \times 50'44	2°07'06
direct	-3062 Dec 10 j 09:52	5° \times 20'55		max. Earth dist.	-3053 Apr 12 j 06:03	25° \times 51'45	30.84664 AU
conjunction	-3061 Mar 24 j 00:24	7° \times 50'42	-2°-7'-11	retrograde	-3053 Jul 27 j 13:12	28° \times 24'22	
minimum elong	-3061 Mar 24 j 00:24	7° \times 50'42	2°07'14	opposition	-3053 Oct 14 j 02:27	26° \times 59'34	-2°-15'-26
max. Earth dist.	-3061 Mar 24 j 17:33	7° \times 52'19	30.82770 AU	min. Earth dist.	-3053 Oct 13 j 17:39	27° \times 00'12	28.84990 AU
retrograde	-3061 Jul 09 j 09:35	10° \times 25'04		direct	-3053 Dec 30 j 17:38	25° \times 35'13	
opposition	-3061 Sep 26 j 11:33	8° \times 59'49	-2°-16'-24	conjunction	-3052 Apr 13 j 09:32	28° \times 05'57	-2°-6'-12
min. Earth dist.	-3061 Sep 25 j 20:10	9° \times 00'54	28.82834 AU	minimum elong	-3052 Apr 13 j 09:33	28° \times 05'57	2°06'13
direct	-3061 Dec 12 j 22:41	7° \times 35'45		max. Earth dist.	-3052 Apr 13 j 19:28	28° \times 06'52	30.84992 AU
conjunction	-3060 Mar 25 j 14:20	10° \times 05'37	-2°-7'-52		-3052 Jun 09 j 14:19	0° \times	
minimum elong	-3060 Mar 25 j 14:20	10° \times 05'37	2°07'55	retrograde	-3052 Jul 29 j 03:24	0° \times 39'27	
max. Earth dist.	-3060 Mar 26 j 06:22	10° \times 07'07	30.82608 AU		-3052 Sep 17 j 12:15	30° \times	
retrograde	-3060 Jul 10 j 22:44	12° \times 39'53		opposition	-3052 Oct 15 j 13:12	29° \times 14'41	-2°-14'-23

Attention, astronomical year style is used: The year -3052 in astronomical counting style is the year 3053 BCE in historical counting style.

min. Earth dist.	-3052 Oct 15 j 04:28	29° 15 '18	28.85267 AU	conjunction	-3043 May 04 j 19:36	18° 17 '02	-1°-49'-52
direct	-3051 Jan 01 j 07:19	27° 15 '50'16		minimum elong	-3043 May 04 j 19:37	18° 17 '02	1°49'51
	-3051 Apr 06 j 13:42	0° 17 '		max. Earth dist.	-3043 May 04 j 21:27	18° 17 '12	30.89071 AU
				retrograde	-3043 Aug 18 j 15:14	20° 17 '49'09	
conjunction	-3051 Apr 16 j 00:10	0° 17 '21'04	-2°-5'-7	opposition	-3043 Nov 04 j 11:25	19° 17 '24'54	-1°-56'-3
minimum elong	-3051 Apr 16 j 00:11	0° 17 '21'04	2°05'07	min. Earth dist.	-3043 Nov 04 j 09:40	19° 17 '25'01	28.89631 AU
max. Earth dist.	-3051 Apr 16 j 08:25	0° 17 '21'50	30.85233 AU	direct	-3042 Jan 21 j 18:32	18° 17 '00'04	
retrograde	-3051 Jul 31 j 16:18	2° 17 '54'24					
opposition	-3051 Oct 17 j 23:55	1° 17 '29'39	-2°-13'-7	conjunction	-3042 May 07 j 10:08	20° 17 '31'34	-1°-47'-10
min. Earth dist.	-3051 Oct 17 j 17:05	1° 17 '30'08	28.85484 AU	minimum elong	-3042 May 07 j 10:08	20° 17 '31'34	1°47'10
direct	-3050 Jan 03 j 19:06	0° 17 '05'10		max. Earth dist.	-3042 May 07 j 10:35	20° 17 '31'36	30.89985 AU
				retrograde	-3042 Aug 21 j 04:01	23° 17 '03'34	
conjunction	-3050 Apr 18 j 14:53	2° 17 '36'01	-2°-3'-50	opposition	-3042 Nov 06 j 21:58	21° 17 '39'25	-1°-53'-4
minimum elong	-3050 Apr 18 j 14:53	2° 17 '36'01	2°03'52	min. Earth dist.	-3042 Nov 06 j 22:05	21° 17 '39'25	28.90542 AU
max. Earth dist.	-3050 Apr 18 j 22:44	2° 17 '36'45	30.85441 AU	direct	-3041 Jan 24 j 06:20	20° 17 '14'36	
retrograde	-3050 Aug 03 j 04:06	5° 17 '09'10					
opposition	-3050 Oct 20 j 10:29	3° 17 '44'27	-2°-11'-40	conjunction	-3041 May 10 j 00:35	22° 17 '46'12	-1°-44'-19
min. Earth dist.	-3050 Oct 20 j 03:53	3° 17 '44'56	28.85673 AU	minimum elong	-3041 May 10 j 00:35	22° 17 '46'12	1°44'17
direct	-3049 Jan 06 j 08:24	2° 17 '19'53		max. Earth dist.	-3041 May 10 j 00:27	22° 17 '46'11	30.90876 AU
				retrograde	-3041 Aug 23 j 16:07	25° 17 '18'04	
conjunction	-3049 Apr 21 j 05:13	4° 17 '50'46	-2°-2'-23	opposition	-3041 Nov 09 j 08:25	23° 17 '54'01	-1°-49'-56
minimum elong	-3049 Apr 21 j 05:14	4° 17 '50'47	2°02'23	min. Earth dist.	-3041 Nov 09 j 08:54	23° 17 '53'59	28.91385 AU
max. Earth dist.	-3049 Apr 21 j 11:10	4° 17 '51'20	30.85641 AU	direct	-3040 Jan 26 j 19:44	22° 17 '29'12	
retrograde	-3049 Aug 05 j 16:06	7° 17 '23'46					
opposition	-3049 Oct 22 j 21:05	5° 17 '59'04	-2°-10'00	conjunction	-3040 May 11 j 15:01	25° 17 '00'53	-1°-41'-18
min. Earth dist.	-3049 Oct 22 j 15:41	5° 17 '59'27	28.85900 AU	minimum elong	-3040 May 11 j 15:02	25° 17 '00'53	1°41'17
direct	-3048 Jan 08 j 19:16	4° 17 '34'24		max. Earth dist.	-3040 May 11 j 12:39	25° 17 '00'40	30.91682 AU
				retrograde	-3040 Aug 25 j 04:52	27° 17 '32'36	
conjunction	-3048 Apr 22 j 19:44	7° 17 '05'21	-2°00'-45	opposition	-3040 Nov 10 j 18:51	26° 17 '08'38	-1°-46'-37
minimum elong	-3048 Apr 22 j 19:44	7° 17 '05'21	2°00'46	min. Earth dist.	-3040 Nov 10 j 20:52	26° 17 '08'30	28.92148 AU
max. Earth dist.	-3048 Apr 23 j 02:00	7° 17 '05'56	30.85902 AU	direct	-3039 Jan 28 j 06:51	24° 17 '43'47	
retrograde	-3048 Aug 07 j 03:01	9° 17 '38'10					
opposition	-3048 Oct 24 j 07:29	8° 17 '13'29	-2°-8'-9	conjunction	-3039 May 14 j 05:38	27° 17 '15'32	-1°-38'-8
min. Earth dist.	-3048 Oct 24 j 02:46	8° 17 '13'49	28.86198 AU	minimum elong	-3039 May 14 j 05:39	27° 17 '15'32	1°38'06
direct	-3047 Jan 10 j 07:07	6° 17 '48'46		max. Earth dist.	-3039 May 14 j 03:01	27° 17 '15'17	30.92397 AU
				retrograde	-3039 Aug 27 j 16:16	29° 17 '47'04	
conjunction	-3047 Apr 25 j 10:03	9° 17 '19'46	-1°-58'-56	opposition	-3039 Nov 13 j 05:19	28° 17 '23'11	-1°-43'-10
minimum elong	-3047 Apr 25 j 10:03	9° 17 '19'46	1°58'55	min. Earth dist.	-3039 Nov 13 j 08:27	28° 17 '22'57	28.92800 AU
max. Earth dist.	-3047 Apr 25 j 14:24	9° 17 '20'10	30.86265 AU	direct	-3038 Jan 30 j 19:19	26° 17 '58'17	
retrograde	-3047 Aug 09 j 15:13	11° 17 '52'25					
opposition	-3047 Oct 26 j 17:55	10° 17 '27'47	-2°-6'-7	conjunction	-3038 May 16 j 19:58	29° 17 '30'04	-1°-34'-49
min. Earth dist.	-3047 Oct 26 j 13:33	10° 17 '28'06	28.86622 AU	minimum elong	-3038 May 16 j 19:59	29° 17 '30'04	1°34'48
direct	-3046 Jan 12 j 17:44	9° 17 '02'59		max. Earth dist.	-3038 May 16 j 14:59	29° 17 '29'36	30.93019 AU
					-3038 May 30 j 07:49	0° 17 '	
conjunction	-3046 Apr 28 j 00:32	11° 17 '34'04	-1°-56'-56	retrograde	-3038 Aug 30 j 03:38	2° 17 ' 01 '26	
minimum elong	-3046 Apr 28 j 00:33	11° 17 '34'04	1°56'56	opposition	-3038 Nov 15 j 15:38	0° 17 '37'35	-1°-39'-33
max. Earth dist.	-3046 Apr 28 j 05:06	11° 17 '34'29	30.86751 AU	min. Earth dist.	-3038 Nov 15 j 19:30	0° 17 '37'19	28.93389 AU
retrograde	-3046 Aug 12 j 01:12	14° 17 '06'34			-3038 Dec 08 j 12:10	30° 17 ' R '	
opposition	-3046 Oct 29 j 04:20	12° 17 '42'00	-2°-3'-53	direct	-3037 Feb 02 j 06:34	29° 17 '12'38	
min. Earth dist.	-3046 Oct 29 j 01:08	12° 17 '42'14	28.87177 AU		-3037 Mar 28 j 21:28	0° 17 '	
direct	-3045 Jan 15 j 05:49	11° 17 '17'11					
				conjunction	-3037 May 19 j 10:22	1° 17 '44'27	-1°-31'-22
conjunction	-3045 Apr 30 j 14:50	13° 17 '48'20	-1°-54'-45	minimum elong	-3037 May 19 j 10:22	1° 17 '44'27	1°31'20
minimum elong	-3045 Apr 30 j 14:51	13° 17 '48'20	1°54'44	max. Earth dist.	-3037 May 19 j 05:18	1° 17 '43'59	30.93588 AU
max. Earth dist.	-3045 Apr 30 j 17:53	13° 17 '48'37	30.87397 AU	retrograde	-3037 Sep 01 j 12:41	4° 17 '15'36	
retrograde	-3045 Aug 14 j 14:15	16° 17 '20'42		opposition	-3037 Nov 18 j 02:02	2° 17 '51'49	-1°-35'-48
opposition	-3045 Oct 31 j 14:42	14° 17 '56'13	-2°-1'-27	min. Earth dist.	-3037 Nov 18 j 07:24	2° 17 '51'26	28.93942 AU
min. Earth dist.	-3045 Oct 31 j 11:14	14° 17 '56'27	28.87891 AU	direct	-3036 Feb 04 j 18:45	1° 17 '26'48	
direct	-3044 Jan 17 j 18:02	13° 17 '31'22					
				conjunction	-3036 May 21 j 00:23	3° 17 '58'37	-1°-27'-47
conjunction	-3044 May 02 j 05:08	16° 17 '02'38	-1°-52'-24	minimum elong	-3036 May 21 j 00:24	3° 17 '58'37	1°27'45
minimum elong	-3044 May 02 j 05:08	16° 17 '02'38	1°52'24	max. Earth dist.	-3036 May 20 j 17:28	3° 17 '57'59	30.94157 AU
max. Earth dist.	-3044 May 02 j 07:57	16° 17 '02'54	30.88179 AU	retrograde	-3036 Sep 03 j 00:51	6° 17 '29'35	
retrograde	-3044 Aug 16 j 01:28	18° 17 '34'53		opposition	-3036 Nov 19 j 12:16	5° 17 '05'50	-1°-31'-54
opposition	-3044 Nov 02 j 01:12	17° 17 '10'30	-1°-58'-50	min. Earth dist.	-3036 Nov 19 j 17:37	5° 17 '05'27	28.94515 AU
min. Earth dist.	-3044 Nov 01 j 23:28	17° 17 '10'37	28.88725 AU	direct	-3035 Feb 06 j 06:39	3° 17 '40'44	
direct	-3043 Jan 19 j 05:03	15° 17 '45'40					

Attention, astronomical year style is used: The year -3035 in astronomical counting style is the year 3036 BCE in historical counting style.

conjunction	-3035 May 23 j 14:35	6°8'12"35	-1°-24'-5	direct	-3027 Feb 24 j 09:08	21°8'28"52	
minimum elong	-3035 May 23 j 14:35	6°8'12"35	1°24'02				
max. Earth dist.	-3035 May 23 j 07:20	6°8'11"55	30.94749 AU	conjunction	-3027 Jun 11 j 05:03	24°8'01"04	0°-50'-25
retrograde	-3035 Sep 05 j 10:21	8°8'43"21		minimum elong	-3027 Jun 11 j 05:03	24°8'01"04	0°50'21
opposition	-3035 Nov 21 j 22:32	7°8'19"38	-1°-27'-52	max. Earth dist.	-3027 Jun 10 j 14:11	23°8'59"41	31.02184 AU
min. Earth dist.	-3035 Nov 22 j 05:39	7°8'19"08	28.95142 AU	retrograde	-3027 Sep 23 j 05:55	26°8'30"33	
direct	-3034 Feb 08 j 17:39	5°8'54"29		opposition	-3027 Dec 09 j 08:55	25°8'07"30	0°-51'-28
				min. Earth dist.	-3027 Dec 09 j 21:21	25°8'06"38	29.02615 AU
conjunction	-3034 May 26 j 04:36	8°8'26"21	-1°-20'-15	direct	-3026 Feb 26 j 20:46	23°8'42"16	
minimum elong	-3034 May 26 j 04:36	8°8'26"21	1°20'13				
max. Earth dist.	-3034 May 25 j 20:25	8°8'25"35	30.95432 AU	conjunction	-3026 Jun 13 j 18:47	26°8'14"30	0°-45'-49
retrograde	-3034 Sep 07 j 22:19	10°8'56"56		minimum elong	-3026 Jun 13 j 18:47	26°8'14"30	0°45'46
opposition	-3034 Nov 24 j 08:46	9°8'33"15	-1°-23'-43	max. Earth dist.	-3026 Jun 13 j 03:28	26°8'13"04	31.02954 AU
min. Earth dist.	-3034 Nov 24 j 15:32	9°8'32"47	28.95868 AU	retrograde	-3026 Sep 25 j 15:01	28°8'43"49	
direct	-3033 Feb 11 j 07:54	8°8'08"03		opposition	-3026 Dec 11 j 19:28	27°8'20"50	0°-46'-31
				min. Earth dist.	-3026 Dec 12 j 09:49	27°8'19"49	29.03338 AU
conjunction	-3033 May 28 j 18:20	10°8'39"57	-1°-16'-18	direct	-3025 Mar 01 j 07:48	25°8'55"34	
minimum elong	-3033 May 28 j 18:20	10°8'39"57	1°16'15				
max. Earth dist.	-3033 May 28 j 09:21	10°8'39"07	30.96217 AU	conjunction	-3025 Jun 16 j 08:06	28°8'27"47	0°-41'-9
retrograde	-3033 Sep 10 j 09:27	13°8'10"22		minimum elong	-3025 Jun 16 j 08:06	28°8'27"47	0°41'05
opposition	-3033 Nov 26 j 19:07	11°8'46"45	-1°-19'-26	max. Earth dist.	-3025 Jun 15 j 15:35	28°8'26"15	31.03646 AU
min. Earth dist.	-3033 Nov 27 j 03:13	11°8'46"10	28.96722 AU		-3025 Jul 30 j 17:26	0°II	
direct	-3032 Feb 13 j 19:50	10°8'21"31		retrograde	-3025 Sep 28 j 02:07	0°II56"56	
					-3025 Nov 28 j 14:03	30°R8	
conjunction	-3032 May 30 j 08:12	12°8'53"28	-1°-12'-15	opposition	-3025 Dec 14 j 05:46	29°8'34"00	0°-41'-29
minimum elong	-3032 May 30 j 08:13	12°8'53"28	1°12'13	min. Earth dist.	-3025 Dec 14 j 20:01	29°8'33"00	29.03988 AU
max. Earth dist.	-3032 May 29 j 23:02	12°8'52"37	30.97143 AU	direct	-3024 Mar 02 j 21:51	28°8'08"40	
	-3032 Aug 05 j 07:49	15°8			-3024 May 30 j 07:39	0°II	
retrograde	-3032 Sep 11 j 21:05	15°8'23"42					
	-3032 Oct 19 j 22:47	15°R8		conjunction	-3024 Jun 17 j 21:29	0°II40"54	0°-36'-26
opposition	-3032 Nov 28 j 05:14	14°8'00"11	-1°-15'-1	minimum elong	-3024 Jun 17 j 21:29	0°II40"54	0°36'22
min. Earth dist.	-3032 Nov 28 j 13:19	13°8'59"36	28.97689 AU	max. Earth dist.	-3024 Jun 17 j 04:02	0°II39"17	31.04273 AU
direct	-3031 Feb 15 j 09:10	12°8'34"57		retrograde	-3024 Sep 29 j 12:30	3°II09"53	
	-3031 May 29 j 19:11	15°8		opposition	-3024 Dec 15 j 16:02	1°II46"58	0°-36'-25
conjunction	-3031 Jun 01 j 22:01	15°8'06"57	-1°-8'-4	min. Earth dist.	-3024 Dec 16 j 07:53	1°II45"52	29.04610 AU
minimum elong	-3031 Jun 01 j 22:01	15°8'06"57	1°08'01	direct	-3023 Mar 05 j 09:33	0°II21"36	
max. Earth dist.	-3031 Jun 01 j 11:12	15°8'05"56	30.98164 AU				
retrograde	-3031 Sep 14 j 09:45	17°8'37"02		conjunction	-3023 Jun 20 j 10:46	2°II53"50	0°-31'-40
opposition	-3031 Nov 30 j 15:32	16°8'13"36	-1°-10'-30	minimum elong	-3023 Jun 20 j 10:46	2°II53"50	0°31'35
min. Earth dist.	-3031 Dec 01 j 00:42	16°8'12"57	28.98747 AU	max. Earth dist.	-3023 Jun 19 j 17:00	2°II52"11	31.04900 AU
	-3030 Jan 22 j 02:36	15°R8		retrograde	-3023 Oct 01 j 23:22	5°II22"38	
direct	-3030 Feb 17 j 20:44	14°8'48"23		opposition	-3023 Dec 18 j 02:20	3°II59"46	0°-31'-18
	-3030 Mar 16 j 10:00	15°8		min. Earth dist.	-3023 Dec 18 j 18:10	3°II58"39	29.05240 AU
				direct	-3022 Mar 07 j 23:08	2°II34"21	
conjunction	-3030 Jun 04 j 11:51	17°8'20"27	-1°-3'-48				
minimum elong	-3030 Jun 04 j 11:51	17°8'20"27	1°03'45	conjunction	-3022 Jun 22 j 23:40	5°II06"34	0°-26'-51
max. Earth dist.	-3030 Jun 04 j 01:15	17°8'19"28	30.99241 AU	minimum elong	-3022 Jun 22 j 23:41	5°II06"34	0°26'47
retrograde	-3030 Sep 16 j 20:45	19°8'50"23		max. Earth dist.	-3022 Jun 22 j 04:37	5°II04"48	31.05557 AU
opposition	-3030 Dec 03 j 01:50	18°8'27"04	-1°-5'-53	retrograde	-3022 Oct 04 j 11:29	7°II35"13	
min. Earth dist.	-3030 Dec 03 j 11:56	18°8'26"22	28.99813 AU	opposition	-3022 Dec 20 j 12:41	6°II12"22	0°-26'-8
direct	-3029 Feb 20 j 09:46	17°8'01"52		min. Earth dist.	-3022 Dec 21 j 05:13	6°II11"13	29.05948 AU
				direct	-3021 Mar 10 j 11:29	4°II46"55	
conjunction	-3029 Jun 07 j 01:33	19°8'33"59	0°-59'-25				
minimum elong	-3029 Jun 07 j 01:33	19°8'33"59	0°59'21	conjunction	-3021 Jun 25 j 12:38	7°II19"08	0°-22'-1
max. Earth dist.	-3029 Jun 06 j 12:53	19°8'32"49	31.00303 AU	minimum elong	-3021 Jun 25 j 12:38	7°II19"08	0°21'56
retrograde	-3029 Sep 19 j 08:26	22°8'03"47		max. Earth dist.	-3021 Jun 24 j 18:12	7°II17"26	31.06315 AU
opposition	-3029 Dec 05 j 12:08	20°8'40"35	-1°-1'-10	retrograde	-3021 Oct 06 j 21:45	9°II47"38	
min. Earth dist.	-3029 Dec 05 j 22:48	20°8'39"49	29.00853 AU	opposition	-3021 Dec 22 j 23:00	8°II24"50	0°-20'-57
direct	-3028 Feb 22 j 21:08	19°8'15"22		min. Earth dist.	-3021 Dec 23 j 15:58	8°II23"39	29.06758 AU
				direct	-3020 Mar 12 j 01:13	6°II59"23	
conjunction	-3028 Jun 08 j 15:21	21°8'47"33	0°-54'-58	max. Earth dist.	-3020 Jun 26 j 05:27	9°II29"46	31.07195 AU
minimum elong	-3028 Jun 08 j 15:21	21°8'47"33	0°54'54				
max. Earth dist.	-3028 Jun 08 j 02:39	21°8'46"22	31.01296 AU	conjunction	-3020 Jun 27 j 01:19	9°II31"36	0°-17'-9
retrograde	-3028 Sep 20 j 17:53	24°8'17"12		minimum elong	-3020 Jun 27 j 01:19	9°II31"36	0°17'04
opposition	-3028 Dec 06 j 22:38	22°8'54"04	0°-56'-21	retrograde	-3020 Oct 08 j 08:53	11°II59"57	
min. Earth dist.	-3028 Dec 07 j 10:56	22°8'53"12	29.01788 AU	opposition	-3020 Dec 24 j 09:19	10°II37"14	0°-15'-43
				min. Earth dist.	-3020 Dec 25 j 02:10	10°II36"03	29.07703 AU

Attention, astronomical year style is used: The year -3019 in astronomical counting style is the year 3020 BCE in historical counting style.

direct	-3019 Mar 14 j 12:50	9°II11'47		opposition	-3012 Jan 09 j 11:06	26°II03'50	0°21'00
				min. Earth dist.	-3012 Jan 10 j 08:20	26°II02'22	29.14499 AU
conjunction	-3019 Jun 29 j 14:10	11°II44'01	0°-12'-15	direct	-3012 Mar 30 j 00:02	24°II38'26	
minimum elong	-3019 Jun 29 j 14:11	11°II44'01	0°12'10	max. Earth dist.	-3012 Jul 14 j 05:56	27°II08'27	31.14799 AU
behind sun begin	-3019 Jun 29 j 09:50	11°II43'38					
behind sun end	-3019 Jun 29 j 18:31	11°II44'24		conjunction	-3012 Jul 15 j 05:21	27°II10'37	0°22'09
max. Earth dist.	-3019 Jun 28 j 19:01	11°II42'15	31.08193 AU	minimum elong	-3012 Jul 15 j 05:21	27°II10'37	0°22'15
retrograde	-3019 Oct 10 j 18:05	14°II12'14		retrograde	-3012 Oct 25 j 18:55	29°II38'01	
opposition	-3019 Dec 26 j 19:43	12°II49'37	0°-10'-29	opposition	-3011 Jan 10 j 21:49	28°II15'48	0°26'10
min. Earth dist.	-3019 Dec 27 j 13:39	12°II48'22	29.08746 AU	min. Earth dist.	-3011 Jan 11 j 19:45	28°II14'16	29.15142 AU
direct	-3018 Mar 17 j 00:52	11°II24'12		direct	-3011 Apr 01 j 14:09	26°II50'22	
max. Earth dist.	-3018 Jul 01 j 06:13	13°II54'33	31.09284 AU				
				conjunction	-3011 Jul 17 j 17:18	29°II22'30	0°26'58
conjunction	-3018 Jul 02 j 02:47	13°II56'27	0°-7'-21	minimum elong	-3011 Jul 17 j 17:18	29°II22'30	0°27'04
minimum elong	-3018 Jul 02 j 02:46	13°II56'27	0°07'17	max. Earth dist.	-3011 Jul 16 j 16:27	29°II20'11	31.15421 AU
behind sun begin	-3018 Jul 01 j 20:46	13°II55'55			-3011 Aug 03 j 16:10	0°☾	
behind sun end	-3018 Jul 02 j 08:47	13°II56'59		retrograde	-3011 Oct 28 j 06:04	1°☾49'45	
retrograde	-3018 Oct 13 j 06:10	16°II24'34		opposition	-3010 Jan 13 j 08:26	0°☾27'32	0°31'18
opposition	-3018 Dec 29 j 06:07	15°II02'03	0°-5'-13	min. Earth dist.	-3010 Jan 14 j 06:14	0°☾26'02	29.15764 AU
min. Earth dist.	-3018 Dec 29 j 23:35	15°II00'49	29.09859 AU		-3010 Jan 30 j 03:50	30°☾II	
direct	-3017 Mar 19 j 12:01	13°II36'39		direct	-3010 Apr 04 j 02:12	29°II02'05	
					-3010 Jun 04 j 17:34	0°☾	
conjunction	-3017 Jul 04 j 15:18	16°II08'55	0°-2'-26	max. Earth dist.	-3010 Jul 19 j 05:19	1°☾31'56	31.16039 AU
minimum elong	-3017 Jul 04 j 15:18	16°II08'55	0°02'21				
behind sun begin	-3017 Jul 04 j 08:45	16°II08'20		conjunction	-3010 Jul 20 j 05:16	1°☾34'09	0°31'44
behind sun end	-3017 Jul 04 j 21:51	16°II09'30		minimum elong	-3010 Jul 20 j 05:16	1°☾34'09	0°31'50
max. Earth dist.	-3017 Jul 03 j 18:57	16°II07'02	31.10396 AU	retrograde	-3010 Oct 30 j 15:14	4°☾01'16	
retrograde	-3017 Oct 15 j 14:32	18°II36'56		opposition	-3009 Jan 15 j 19:16	2°☾39'05	0°36'23
asc. node	-3017 Dec 28 j 23:49	17°II19'02		min. Earth dist.	-3009 Jan 16 j 17:56	2°☾37'31	29.16404 AU
opposition	-3017 Dec 31 j 16:43	17°II14'30	0°00'02	direct	-3009 Apr 06 j 15:17	1°☾13'37	
min. Earth dist.	-3016 Jan 01 j 11:50	17°II13'10	29.10965 AU				
direct	-3016 Mar 20 j 22:46	15°II49'08		conjunction	-3009 Jul 22 j 16:46	3°☾45'37	0°36'27
max. Earth dist.	-3016 Jul 05 j 06:29	18°II19'26	31.11479 AU	minimum elong	-3009 Jul 22 j 16:45	3°☾45'37	0°36'33
				max. Earth dist.	-3009 Jul 21 j 15:50	3°☾43'18	31.16713 AU
conjunction	-3016 Jul 06 j 03:52	18°II21'25	0°02'37	retrograde	-3009 Nov 02 j 02:33	6°☾12'38	
minimum elong	-3016 Jul 06 j 03:51	18°II21'25	0°02'42	opposition	-3008 Jan 18 j 05:54	4°☾50'28	0°41'24
behind sun begin	-3016 Jul 05 j 21:18	18°II20'50		min. Earth dist.	-3008 Jan 19 j 03:40	4°☾48'58	29.17123 AU
behind sun end	-3016 Jul 06 j 10:23	18°II22'00		direct	-3008 Apr 08 j 03:25	3°☾25'00	
retrograde	-3016 Oct 17 j 00:52	20°II49'19		max. Earth dist.	-3008 Jul 23 j 04:11	5°☾54'43	31.17472 AU
opposition	-3015 Jan 02 j 03:05	19°II26'58	0°05'18				
min. Earth dist.	-3015 Jan 02 j 21:59	19°II25'39	29.12005 AU	conjunction	-3008 Jul 24 j 04:27	5°☾56'58	0°41'07
direct	-3015 Mar 23 j 11:39	18°II01'36		minimum elong	-3008 Jul 24 j 04:27	5°☾56'58	0°41'13
				retrograde	-3008 Nov 03 j 10:36	8°☾23'53	
conjunction	-3015 Jul 08 j 16:26	20°II33'53	0°07'32	opposition	-3007 Jan 19 j 16:39	7°☾01'46	0°46'21
minimum elong	-3015 Jul 08 j 16:26	20°II33'53	0°07'37	min. Earth dist.	-3007 Jan 20 j 15:27	7°☾00'12	29.17945 AU
behind sun begin	-3015 Jul 08 j 10:30	20°II33'22		direct	-3007 Apr 10 j 14:27	5°☾36'19	
behind sun end	-3015 Jul 08 j 22:22	20°II34'25					
max. Earth dist.	-3015 Jul 07 j 18:19	20°II31'50	31.12463 AU	conjunction	-3007 Jul 26 j 15:57	8°☾08'16	0°45'44
retrograde	-3015 Oct 19 j 11:05	23°II01'41		minimum elong	-3007 Jul 26 j 15:57	8°☾08'16	0°45'49
opposition	-3014 Jan 04 j 13:50	21°II39'23	0°10'34	max. Earth dist.	-3007 Jul 25 j 15:26	8°☾05'59	31.18355 AU
min. Earth dist.	-3014 Jan 05 j 10:12	21°II37'58	29.12947 AU	retrograde	-3007 Nov 05 j 20:33	10°☾35'07	
direct	-3014 Mar 25 j 22:07	20°II14'01		opposition	-3006 Jan 22 j 03:27	9°☾13'04	0°51'14
max. Earth dist.	-3014 Jul 10 j 06:24	22°II44'12	31.13346 AU	min. Earth dist.	-3006 Jan 23 j 01:16	9°☾11'34	29.18876 AU
				direct	-3006 Apr 13 j 02:34	7°☾47'40	
conjunction	-3014 Jul 11 j 04:48	22°II46'17	0°12'25	max. Earth dist.	-3006 Jul 28 j 02:53	10°☾17'20	31.19324 AU
minimum elong	-3014 Jul 11 j 04:48	22°II46'17	0°12'30				
behind sun begin	-3014 Jul 11 j 00:37	22°II45'55		conjunction	-3006 Jul 29 j 03:18	10°☾19'36	0°50'16
behind sun end	-3014 Jul 11 j 08:58	22°II46'39		minimum elong	-3006 Jul 29 j 03:17	10°☾19'36	0°50'22
retrograde	-3014 Oct 21 j 21:29	25°II13'57		retrograde	-3006 Nov 08 j 06:38	12°☾46'25	
opposition	-3013 Jan 07 j 00:31	23°II51'41	0°15'48	opposition	-3005 Jan 24 j 14:24	11°☾24'27	0°56'03
min. Earth dist.	-3013 Jan 07 j 20:55	23°II50'16	29.13767 AU	min. Earth dist.	-3005 Jan 25 j 13:00	11°☾22'53	29.19891 AU
direct	-3013 Mar 28 j 11:46	22°II26'19		direct	-3005 Apr 15 j 11:53	9°☾59'06	
conjunction	-3013 Jul 13 j 17:04	24°II58'32	0°17'18	conjunction	-3005 Jul 31 j 14:41	12°☾31'02	0°54'45
minimum elong	-3013 Jul 13 j 17:04	24°II58'32	0°17'23	minimum elong	-3005 Jul 31 j 14:40	12°☾31'02	0°54'50
max. Earth dist.	-3013 Jul 12 j 17:14	24°II56'20	31.14112 AU	max. Earth dist.	-3005 Jul 30 j 14:39	12°☾28'48	31.20353 AU
retrograde	-3013 Oct 24 j 09:11	27°II26'04		retrograde	-3005 Nov 10 j 16:52	14°☾57'50	

Attention, astronomical year style is used: The year -3004 in astronomical counting style is the year 3005 BCE in historical counting style.

opposition	-3004 Jan 27 j 01:13	13° \mathring{E} 35'56	1°00'47	opposition	-2996 Feb 13 j 19:16	1° \mathring{O} 07'34	1°34'53
min. Earth dist.	-3004 Jan 27 j 23:31	13° \mathring{E} 34'24	29.20913 AU	min. Earth dist.	-2996 Feb 14 j 19:13	1° \mathring{O} 05'55	29.25631 AU
direct	-3004 Apr 17 j 00:42	12° \mathring{E} 10'40			-2996 Apr 01 j 05:56	30° \mathring{R} \mathring{E}	
max. Earth dist.	-3004 Aug 01 j 00:59	14° \mathring{E} 40'16	31.21353 AU	direct	-2996 May 05 j 02:23	29° \mathring{E} 42'24	
					-2996 Jun 07 j 09:15	0° \mathring{O}	
conjunction	-3004 Aug 02 j 02:00	14° \mathring{E} 42'36	0°59'08	conjunction	-2996 Aug 19 j 17:23	2° \mathring{O} 13'48	1°30'36
minimum elong	-3004 Aug 02 j 02:00	14° \mathring{E} 42'36	0°59'14	minimum elong	-2996 Aug 19 j 17:23	2° \mathring{O} 13'48	1°30'40
retrograde	-3004 Nov 12 j 05:03	17° \mathring{E} 09'22		max. Earth dist.	-2996 Aug 18 j 16:54	2° \mathring{O} 11'30	31.25717 AU
opposition	-3003 Jan 28 j 12:17	15° \mathring{E} 47'32	1°05'26	retrograde	-2996 Nov 29 j 12:19	4° \mathring{O} 40'09	
min. Earth dist.	-3003 Jan 29 j 11:02	15° \mathring{E} 45'58	29.21895 AU	opposition	-2995 Feb 15 j 06:41	3° \mathring{O} 18'22	1°38'34
direct	-3003 Apr 19 j 12:04	14° \mathring{E} 22'19		min. Earth dist.	-2995 Feb 16 j 05:44	3° \mathring{O} 16'47	29.26030 AU
				direct	-2995 May 07 j 15:45	1° \mathring{O} 53'13	
conjunction	-3003 Aug 04 j 13:21	16° \mathring{E} 54'15	1°03'26	max. Earth dist.	-2995 Aug 21 j 02:51	4° \mathring{O} 22'11	31.26156 AU
minimum elong	-3003 Aug 04 j 13:20	16° \mathring{E} 54'15	1°03'32				
max. Earth dist.	-3003 Aug 03 j 13:04	16° \mathring{E} 51'59	31.22277 AU	conjunction	-2995 Aug 22 j 03:40	4° \mathring{O} 24'31	1°33'59
retrograde	-3003 Nov 14 j 14:59	19° \mathring{E} 20'59		minimum elong	-2995 Aug 22 j 03:40	4° \mathring{O} 24'31	1°34'04
opposition	-3002 Jan 30 j 23:31	17° \mathring{E} 59'13	1°09'59	retrograde	-2995 Dec 01 j 23:25	6° \mathring{O} 50'52	
min. Earth dist.	-3002 Jan 31 j 22:49	17° \mathring{E} 57'37	29.22761 AU	opposition	-2994 Feb 17 j 18:12	5° \mathring{O} 29'04	1°42'07
direct	-3002 Apr 22 j 01:23	16° \mathring{E} 34'03		min. Earth dist.	-2994 Feb 18 j 16:51	5° \mathring{O} 27'31	29.26531 AU
max. Earth dist.	-3002 Aug 05 j 22:56	19° \mathring{E} 03'33	31.23081 AU	direct	-2994 May 10 j 02:02	4° \mathring{O} 03'57	
conjunction	-3002 Aug 07 j 00:32	19° \mathring{E} 05'56	1°07'39	conjunction	-2994 Aug 24 j 14:03	6° \mathring{O} 35'11	1°37'14
minimum elong	-3002 Aug 07 j 00:31	19° \mathring{E} 05'56	1°07'44	minimum elong	-2994 Aug 24 j 14:03	6° \mathring{O} 35'11	1°37'19
retrograde	-3002 Nov 17 j 02:52	21° \mathring{E} 32'38		max. Earth dist.	-2994 Aug 23 j 14:45	6° \mathring{O} 33'00	31.26697 AU
opposition	-3001 Feb 02 j 10:43	20° \mathring{E} 10'54	1°14'26	retrograde	-2994 Dec 04 j 08:55	9° \mathring{O} 01'32	
min. Earth dist.	-3001 Feb 03 j 09:44	20° \mathring{E} 09'20	29.23512 AU	opposition	-2993 Feb 20 j 05:44	7° \mathring{O} 39'45	1°45'32
direct	-3001 Apr 24 j 12:59	18° \mathring{E} 45'46		min. Earth dist.	-2993 Feb 21 j 04:15	7° \mathring{O} 38'13	29.27106 AU
max. Earth dist.	-3001 Aug 08 j 10:54	21° \mathring{E} 15'18	31.23748 AU	direct	-2993 May 12 j 14:09	6° \mathring{O} 14'43	
				max. Earth dist.	-2993 Aug 26 j 00:17	8° \mathring{O} 43'39	31.27298 AU
conjunction	-3001 Aug 09 j 11:40	21° \mathring{E} 17'37	1°11'45				
minimum elong	-3001 Aug 09 j 11:40	21° \mathring{E} 17'37	1°11'51	conjunction	-2993 Aug 27 j 00:09	8° \mathring{O} 45'53	1°40'21
retrograde	-3001 Nov 19 j 12:48	23° \mathring{E} 44'15		minimum elong	-2993 Aug 27 j 00:08	8° \mathring{O} 45'53	1°40'26
opposition	-3000 Feb 04 j 22:04	22° \mathring{E} 22'33	1°18'46	retrograde	-2993 Dec 06 j 20:59	11° \mathring{O} 12'15	
min. Earth dist.	-3000 Feb 05 j 22:08	22° \mathring{E} 20'54	29.24110 AU	opposition	-2992 Feb 22 j 17:14	9° \mathring{O} 50'30	1°48'47
direct	-3000 Apr 26 j 02:56	20° \mathring{E} 57'26		min. Earth dist.	-2992 Feb 23 j 14:52	9° \mathring{O} 49'02	29.27724 AU
				direct	-2992 May 14 j 01:22	8° \mathring{O} 25'31	
conjunction	-3000 Aug 10 j 22:40	23° \mathring{E} 29'12	1°15'46	max. Earth dist.	-2992 Aug 27 j 11:57	10° \mathring{O} 54'33	31.27900 AU
minimum elong	-3000 Aug 10 j 22:39	23° \mathring{E} 29'12	1°15'51				
max. Earth dist.	-3000 Aug 09 j 20:42	23° \mathring{E} 26'47	31.24279 AU	conjunction	-2992 Aug 28 j 10:26	10° \mathring{O} 56'39	1°43'19
retrograde	-3000 Nov 21 j 00:26	25° \mathring{E} 55'47		minimum elong	-2992 Aug 28 j 10:25	10° \mathring{O} 56'39	1°43'24
opposition	-2999 Feb 06 j 09:13	24° \mathring{E} 34'05	1°22'59	retrograde	-2992 Dec 08 j 07:16	13° \mathring{O} 23'04	
min. Earth dist.	-2999 Feb 07 j 08:32	24° \mathring{E} 32'28	29.24581 AU	opposition	-2991 Feb 24 j 04:57	12° \mathring{O} 01'20	1°51'52
direct	-2999 Apr 28 j 15:59	23° \mathring{E} 08'57		min. Earth dist.	-2991 Feb 25 j 03:13	11° \mathring{O} 59'49	29.28309 AU
max. Earth dist.	-2999 Aug 12 j 08:14	25° \mathring{E} 38'16	31.24687 AU	direct	-2991 May 16 j 14:37	10° \mathring{O} 36'26	
conjunction	-2999 Aug 13 j 09:40	25° \mathring{E} 40'39	1°19'39	conjunction	-2991 Aug 30 j 20:33	13° \mathring{O} 07'31	1°46'09
minimum elong	-2999 Aug 13 j 09:40	25° \mathring{E} 40'39	1°19'44	minimum elong	-2991 Aug 30 j 20:33	13° \mathring{O} 07'31	1°46'13
retrograde	-2999 Nov 23 j 08:24	28° \mathring{E} 07'10		max. Earth dist.	-2991 Aug 29 j 21:28	13° \mathring{O} 05'21	31.28456 AU
opposition	-2998 Feb 08 j 20:40	26° \mathring{E} 45'27	1°27'05		-2991 Oct 26 j 15:31	15° \mathring{O}	
min. Earth dist.	-2998 Feb 09 j 21:07	26° \mathring{E} 43'46	29.24956 AU	retrograde	-2991 Dec 10 j 19:19	15° \mathring{O} 33'57	
direct	-2998 May 01 j 03:49	25° \mathring{E} 20'19			-2990 Jan 26 j 13:06	15° \mathring{R} \mathring{O}	
				opposition	-2990 Feb 26 j 16:44	14° \mathring{O} 12'16	1°54'48
conjunction	-2998 Aug 15 j 20:15	27° \mathring{E} 51'54	1°23'25	min. Earth dist.	-2990 Feb 27 j 13:46	14° \mathring{O} 10'50	29.28827 AU
minimum elong	-2998 Aug 15 j 20:15	27° \mathring{E} 51'54	1°23'31	direct	-2990 May 19 j 03:08	12° \mathring{O} 47'25	
max. Earth dist.	-2998 Aug 14 j 18:43	27° \mathring{E} 49'31	31.25033 AU		-2990 Aug 25 j 01:28	15° \mathring{O}	
	-2998 Oct 23 j 22:43	0° \mathring{O}		max. Earth dist.	-2990 Sep 01 j 08:19	15° \mathring{O} 16'22	31.28908 AU
retrograde	-2998 Nov 25 j 17:44	0° \mathring{O} 18'21					
	-2998 Dec 29 j 07:50	30° \mathring{R} \mathring{E}		conjunction	-2990 Sep 02 j 06:38	15° \mathring{O} 18'27	1°48'49
opposition	-2997 Feb 11 j 07:59	28° \mathring{E} 56'36	1°31'03	minimum elong	-2990 Sep 02 j 06:38	15° \mathring{O} 18'27	1°48'53
min. Earth dist.	-2997 Feb 12 j 07:24	28° \mathring{E} 55'00	29.25283 AU	retrograde	-2990 Dec 13 j 04:23	17° \mathring{O} 44'56	
direct	-2997 May 03 j 16:34	27° \mathring{E} 31'28		opposition	-2989 Mar 01 j 04:43	16° \mathring{O} 23'15	1°57'34
	-2997 Aug 16 j 23:23	0° \mathring{O}		min. Earth dist.	-2989 Mar 02 j 02:42	16° \mathring{O} 21'45	29.29229 AU
max. Earth dist.	-2997 Aug 17 j 05:32	0° \mathring{O} 00'35	31.25349 AU		-2989 May 11 j 18:30	15° \mathring{R} \mathring{O}	
				direct	-2989 May 21 j 14:50	14° \mathring{O} 58'29	
conjunction	-2997 Aug 18 j 06:52	0° \mathring{O} 02'57	1°27'04		-2989 May 31 j 07:37	15° \mathring{O}	
minimum elong	-2997 Aug 18 j 06:51	0° \mathring{O} 02'57	1°27'09				
retrograde	-2997 Nov 28 j 03:15	2° \mathring{O} 29'20					

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Attention, astronomical year style is used: The year -2989 in astronomical counting style is the year 2990 BCE in historical counting style.

conjunction	-2989 Sep 04 j 16:45	17°029'26	1°51'19	conjunction	-2981 Sep 21 j 21:55	4°05'44	2°05'24
minimum elong	-2989 Sep 04 j 16:44	17°029'26	1°51'23	minimum elong	-2981 Sep 21 j 21:55	4°05'44	2°05'26
max. Earth dist.	-2989 Sep 03 j 18:24	17°027'20	31.29240 AU	max. Earth dist.	-2981 Sep 21 j 04:27	4°05'30	31.29335 AU
retrograde	-2989 Dec 15 j 14:20	19°055'56		retrograde	-2980 Jan 02 j 01:40	7°02'13	
opposition	-2988 Mar 02 j 16:26	18°034'16	2°00'10	opposition	-2980 Mar 20 j 16:56	5°05'36	2°14'30
min. Earth dist.	-2988 Mar 03 j 13:25	18°032'50	29.29485 AU	min. Earth dist.	-2980 Mar 21 j 10:06	5°05'26	29.29591 AU
direct	-2988 May 23 j 03:40	17°009'31		direct	-2980 Jun 10 j 00:50	4°03'58	
max. Earth dist.	-2988 Sep 05 j 04:27	19°038'18	31.29416 AU				
conjunction	-2988 Sep 06 j 02:51	19°040'25	1°53'40	conjunction	-2980 Sep 23 j 07:16	7°05'15	2°06'23
minimum elong	-2988 Sep 06 j 02:51	19°040'24	1°53'44	minimum elong	-2980 Sep 23 j 07:16	7°05'15	2°06'25
retrograde	-2988 Dec 17 j 00:33	22°006'57		max. Earth dist.	-2980 Sep 22 j 14:36	7°03'41	31.29538 AU
opposition	-2987 Mar 05 j 04:30	20°045'15	2°02'36	retrograde	-2979 Jan 03 j 12:23	9°03'13	
min. Earth dist.	-2987 Mar 06 j 02:03	20°043'47	29.29603 AU	opposition	-2979 Mar 23 j 05:12	8°01'14	2°15'26
direct	-2987 May 25 j 13:53	19°020'33		min. Earth dist.	-2979 Mar 23 j 20:45	8°00'10	29.29791 AU
				direct	-2979 Jun 12 j 14:03	6°04'51	
conjunction	-2987 Sep 08 j 12:47	21°051'20	1°55'51	conjunction	-2979 Sep 25 j 16:30	9°01'53	2°07'10
minimum elong	-2987 Sep 08 j 12:47	21°051'20	1°55'55	minimum elong	-2979 Sep 25 j 16:30	9°01'53	2°07'12
max. Earth dist.	-2987 Sep 07 j 15:14	21°049'18	31.29464 AU	max. Earth dist.	-2979 Sep 25 j 00:18	9°01'42	31.29727 AU
retrograde	-2987 Dec 19 j 09:37	24°017'54		retrograde	-2978 Jan 05 j 23:14	11°04'28	
opposition	-2986 Mar 07 j 16:32	22°056'10	2°04'51	opposition	-2978 Mar 25 j 17:42	10°02'58	2°16'11
min. Earth dist.	-2986 Mar 08 j 13:19	22°054'45	29.29585 AU	min. Earth dist.	-2978 Mar 26 j 09:19	10°01'55	29.29972 AU
direct	-2986 May 28 j 03:16	21°031'29		direct	-2978 Jun 15 j 00:42	8°05'40	
				max. Earth dist.	-2978 Sep 27 j 11:00	11°02'13	31.29876 AU
conjunction	-2986 Sep 10 j 22:33	24°002'09	1°57'53	conjunction	-2978 Sep 28 j 01:56	11°02'37	2°07'47
minimum elong	-2986 Sep 10 j 22:33	24°002'09	1°57'57	minimum elong	-2978 Sep 28 j 01:56	11°02'37	2°07'49
max. Earth dist.	-2986 Sep 10 j 00:30	24°000'05	31.29400 AU	retrograde	-2977 Jan 08 j 08:16	13°05'38	
retrograde	-2986 Dec 21 j 20:43	26°028'46		opposition	-2977 Mar 28 j 06:02	12°03'17	2°16'45
opposition	-2985 Mar 10 j 04:28	25°006'58	2°06'55	min. Earth dist.	-2977 Mar 28 j 20:42	12°03'48	29.30071 AU
min. Earth dist.	-2985 Mar 11 j 00:57	25°005'34	29.29500 AU	direct	-2977 Jun 17 j 13:19	11°07'34	
direct	-2985 May 30 j 13:07	23°042'16					
max. Earth dist.	-2985 Sep 12 j 11:50	26°010'55	31.29287 AU	conjunction	-2977 Sep 30 j 11:14	13°03'26	2°08'12
conjunction	-2985 Sep 13 j 08:16	26°012'51	1°59'44	minimum elong	-2977 Sep 30 j 11:14	13°03'26	2°08'14
minimum elong	-2985 Sep 13 j 08:16	26°012'51	1°59'47	max. Earth dist.	-2977 Sep 29 j 19:51	13°03'59	31.29921 AU
retrograde	-2985 Dec 24 j 05:53	28°039'29		retrograde	-2976 Jan 10 j 19:25	16°04'42	
opposition	-2984 Mar 11 j 16:32	27°017'37	2°08'48	opposition	-2976 Mar 29 j 18:34	14°04'40	2°17'06
min. Earth dist.	-2984 Mar 12 j 12:46	27°016'14	29.29377 AU	min. Earth dist.	-2976 Mar 30 j 08:48	14°04'12	29.30063 AU
direct	-2984 Jun 01 j 01:00	25°052'56		direct	-2976 Jun 18 j 23:06	13°01'83	
conjunction	-2984 Sep 14 j 17:42	28°023'23	2°01'25	conjunction	-2976 Oct 01 j 20:39	15°04'81	2°08'27
minimum elong	-2984 Sep 14 j 17:41	28°023'23	2°01'28	minimum elong	-2976 Oct 01 j 20:39	15°04'81	2°08'28
max. Earth dist.	-2984 Sep 13 j 20:59	28°021'27	31.29176 AU	max. Earth dist.	-2976 Oct 01 j 06:49	15°04'58	31.29839 AU
	-2984 Oct 31 j 08:42	0°00'00		retrograde	-2975 Jan 12 j 05:03	18°01'59	
retrograde	-2984 Dec 25 j 17:44	0°050'04		opposition	-2975 Apr 01 j 07:14	16°05'33	2°17'16
	-2983 Feb 22 j 02:34	30°00'00		min. Earth dist.	-2975 Apr 01 j 21:16	16°05'27	29.29904 AU
opposition	-2983 Mar 14 j 04:30	29°028'09	2°10'31	direct	-2975 Jun 21 j 11:00	15°02'26	
min. Earth dist.	-2983 Mar 14 j 23:21	29°026'52	29.29300 AU				
direct	-2983 Jun 03 j 12:19	28°003'29		conjunction	-2975 Oct 04 j 05:57	17°05'05	2°08'30
	-2983 Sep 02 j 00:11	0°00'00		minimum elong	-2975 Oct 04 j 05:57	17°05'05	2°08'31
max. Earth dist.	-2983 Sep 16 j 08:24	0°032'04	31.29131 AU	max. Earth dist.	-2975 Oct 03 j 15:39	17°05'44	31.29620 AU
				retrograde	-2974 Jan 14 j 17:18	20°02'33	
conjunction	-2983 Sep 17 j 03:15	0°033'51	2°02'55	opposition	-2974 Apr 03 j 19:52	19°04'24	2°17'14
minimum elong	-2983 Sep 17 j 03:15	0°033'51	2°02'58	min. Earth dist.	-2974 Apr 04 j 08:42	19°03'32	29.29622 AU
retrograde	-2983 Dec 28 j 04:20	3°000'34		direct	-2974 Jun 23 j 22:00	17°04'18	
opposition	-2982 Mar 16 j 16:45	1°038'36	2°12'02				
min. Earth dist.	-2982 Mar 17 j 11:31	1°037'20	29.29306 AU	conjunction	-2974 Oct 06 j 15:14	20°00'51	2°08'23
direct	-2982 Jun 06 j 01:19	0°014'00		minimum elong	-2974 Oct 06 j 15:14	20°00'51	2°08'24
				max. Earth dist.	-2974 Oct 06 j 02:26	20°00'38	31.29271 AU
conjunction	-2982 Sep 19 j 12:29	2°044'15	2°04'15	retrograde	-2973 Jan 17 j 03:58	22°03'72	
minimum elong	-2982 Sep 19 j 12:29	2°044'15	2°04'18	opposition	-2973 Apr 06 j 08:35	21°01'59	2°17'00
max. Earth dist.	-2982 Sep 18 j 17:47	2°042'30	31.29194 AU	min. Earth dist.	-2973 Apr 06 j 21:39	21°01'16	29.29216 AU
retrograde	-2982 Dec 30 j 16:16	5°011'03		direct	-2973 Jun 26 j 10:12	19°05'10	
opposition	-2981 Mar 19 j 04:48	3°049'04	2°13'22	max. Earth dist.	-2973 Oct 08 j 11:38	22°01'18	31.28835 AU
min. Earth dist.	-2981 Mar 19 j 21:38	3°047'56	29.29414 AU				
direct	-2981 Jun 08 j 13:09	2°024'31		conjunction	-2973 Oct 09 j 00:23	22°02'30	2°08'05
				minimum elong	-2973 Oct 09 j 00:23	22°02'30	2°08'05

Attention, astronomical year style is used: The year -2972 in astronomical counting style is the year 2973 BCE in historical counting style.

retrograde	-2972 Jan 19 j 15:50	24° \mathring{M} 48'07		retrograde	-2964 Feb 06 j 07:13	12° \mathring{A} 14'47	
opposition	-2972 Apr 07 j 21:01	23° \mathring{M} 25'48	2°16'35	opposition	-2964 Apr 26 j 03:27	10° \mathring{A} 52'09	2°06'15
min. Earth dist.	-2972 Apr 08 j 08:18	23° \mathring{M} 25'02	29.28749 AU	min. Earth dist.	-2964 Apr 26 j 08:07	10° \mathring{A} 51'50	29.26405 AU
direct	-2972 Jun 27 j 21:54	22° \mathring{M} 01'43		direct	-2964 Jul 15 j 16:36	9° \mathring{A} 28'40	
conjunction	-2972 Oct 10 j 09:31	24° \mathring{M} 31'02	2°07'36	conjunction	-2964 Oct 27 j 09:52	11° \mathring{A} 57'22	1°57'12
minimum elong	-2972 Oct 10 j 09:31	24° \mathring{M} 31'02	2°07'36	minimum elong	-2964 Oct 27 j 09:52	11° \mathring{A} 57'22	1°57'11
max. Earth dist.	-2972 Oct 09 j 21:56	24° \mathring{M} 29'56	31.28356 AU	max. Earth dist.	-2964 Oct 27 j 05:40	11° \mathring{A} 56'58	31.26071 AU
retrograde	-2971 Jan 21 j 02:04	26° \mathring{M} 58'44		retrograde	-2963 Feb 07 j 19:58	14° \mathring{A} 26'15	
opposition	-2971 Apr 10 j 09:49	25° \mathring{M} 36'20	2°15'59	opposition	-2963 Apr 28 j 16:32	13° \mathring{A} 03'35	2°04'07
min. Earth dist.	-2971 Apr 10 j 21:12	25° \mathring{M} 35'34	29.28285 AU	min. Earth dist.	-2963 Apr 28 j 19:26	13° \mathring{A} 03'23	29.25948 AU
direct	-2971 Jun 30 j 09:58	24° \mathring{M} 12'18		direct	-2963 Jul 18 j 03:18	11° \mathring{A} 40'09	
conjunction	-2971 Oct 12 j 18:27	26° \mathring{M} 41'29	2°06'56	conjunction	-2963 Oct 29 j 19:03	14° \mathring{A} 08'46	1°55'07
minimum elong	-2971 Oct 12 j 18:28	26° \mathring{M} 41'29	2°06'56	minimum elong	-2963 Oct 29 j 19:04	14° \mathring{A} 08'46	1°55'05
max. Earth dist.	-2971 Oct 12 j 08:08	26° \mathring{M} 40'30	31.27923 AU	max. Earth dist.	-2963 Oct 29 j 15:37	14° \mathring{A} 08'27	31.25537 AU
retrograde	-2970 Jan 23 j 13:03	29° \mathring{M} 09'17		retrograde	-2962 Feb 10 j 07:38	16° \mathring{A} 37'49	
opposition	-2970 Apr 12 j 22:29	27° \mathring{M} 46'49	2°15'10	opposition	-2962 May 01 j 05:48	15° \mathring{A} 15'04	2°01'48
min. Earth dist.	-2970 Apr 13 j 07:49	27° \mathring{M} 46'11	29.27879 AU	min. Earth dist.	-2962 May 01 j 09:06	15° \mathring{A} 14'51	29.25339 AU
direct	-2970 Jul 02 j 23:23	26° \mathring{M} 22'49		direct	-2962 Jul 20 j 15:33	13° \mathring{A} 51'40	
conjunction	-2970 Oct 15 j 03:29	28° \mathring{M} 51'55	2°06'05	conjunction	-2962 Nov 01 j 04:23	16° \mathring{A} 20'12	1°52'52
minimum elong	-2970 Oct 15 j 03:29	28° \mathring{M} 51'55	2°06'05	minimum elong	-2962 Nov 01 j 04:23	16° \mathring{A} 20'12	1°52'51
max. Earth dist.	-2970 Oct 14 j 17:47	28° \mathring{M} 51'00	31.27560 AU	max. Earth dist.	-2962 Nov 01 j 01:51	16° \mathring{A} 19'57	31.24864 AU
retrograde	-2970 Nov 15 j 07:40	0° \mathring{A}		retrograde	-2961 Feb 12 j 20:06	18° \mathring{A} 49'20	
opposition	-2969 Jan 26 j 00:11	1° \mathring{A} 19'50		opposition	-2961 May 03 j 18:41	17° \mathring{A} 26'31	1°59'18
min. Earth dist.	-2969 Apr 13 j 19:27	30° \mathring{R} \mathring{M}		min. Earth dist.	-2961 May 03 j 20:27	17° \mathring{A} 26'23	29.24582 AU
direct	-2969 Apr 15 j 11:05	29° \mathring{M} 57'19	2°14'10	direct	-2961 Jul 23 j 05:04	16° \mathring{A} 03'08	
conjunction	-2969 Apr 15 j 20:04	29° \mathring{M} 56'43	29.27570 AU	conjunction	-2961 Nov 03 j 13:35	18° \mathring{A} 31'33	1°50'27
direct	-2969 Jul 05 j 10:00	28° \mathring{M} 33'23		minimum elong	-2961 Nov 03 j 13:35	18° \mathring{A} 31'33	1°50'25
retrograde	-2969 Sep 19 j 02:42	0° \mathring{A}		max. Earth dist.	-2961 Nov 03 j 11:09	18° \mathring{A} 31'19	31.24052 AU
conjunction	-2969 Oct 17 j 12:33	1° \mathring{A} 02'25	2°05'03	retrograde	-2960 Feb 15 j 07:42	21° \mathring{A} 00'49	
minimum elong	-2969 Oct 17 j 12:34	1° \mathring{A} 02'25	2°05'03	opposition	-2960 May 05 j 07:51	19° \mathring{A} 37'52	1°56'39
max. Earth dist.	-2969 Oct 17 j 04:40	1° \mathring{A} 01'40	31.27297 AU	min. Earth dist.	-2960 May 05 j 09:36	19° \mathring{A} 37'45	29.23725 AU
retrograde	-2968 Jan 28 j 09:26	3° \mathring{A} 30'29		direct	-2960 Jul 24 j 16:16	18° \mathring{A} 14'30	
opposition	-2968 Apr 16 j 23:47	2° \mathring{A} 07'56	2°12'58	conjunction	-2960 Nov 04 j 22:42	20° \mathring{A} 42'47	1°47'53
min. Earth dist.	-2968 Apr 17 j 07:12	2° \mathring{A} 07'26	29.27330 AU	minimum elong	-2960 Nov 04 j 22:42	20° \mathring{A} 42'47	1°47'51
direct	-2968 Jul 06 j 22:29	0° \mathring{A} 44'06		max. Earth dist.	-2960 Nov 04 j 22:04	20° \mathring{A} 42'44	31.23169 AU
conjunction	-2968 Oct 18 j 21:24	3° \mathring{A} 13'03	2°03'50	retrograde	-2959 Feb 16 j 17:08	23° \mathring{A} 12'09	
minimum elong	-2968 Oct 18 j 21:24	3° \mathring{A} 13'03	2°03'51	opposition	-2959 May 07 j 20:57	21° \mathring{A} 49'06	1°53'49
max. Earth dist.	-2968 Oct 18 j 13:35	3° \mathring{A} 12'18	31.27094 AU	min. Earth dist.	-2959 May 07 j 21:12	21° \mathring{A} 49'05	29.22817 AU
retrograde	-2967 Jan 29 j 20:55	5° \mathring{A} 41'16		direct	-2959 Jul 27 j 05:41	20° \mathring{A} 25'44	
opposition	-2967 Apr 19 j 12:38	4° \mathring{A} 18'43	2°11'35	conjunction	-2959 Nov 07 j 07:44	22° \mathring{A} 53'54	1°45'09
min. Earth dist.	-2967 Apr 19 j 19:04	4° \mathring{A} 18'17	29.27149 AU	minimum elong	-2959 Nov 07 j 07:44	22° \mathring{A} 53'54	1°45'07
direct	-2967 Jul 09 j 08:04	2° \mathring{A} 54'58		max. Earth dist.	-2959 Nov 07 j 07:07	22° \mathring{A} 53'51	31.22277 AU
conjunction	-2967 Oct 21 j 06:31	5° \mathring{A} 23'51	2°02'27	retrograde	-2958 Feb 19 j 04:41	25° \mathring{A} 23'23	
minimum elong	-2967 Oct 21 j 06:32	5° \mathring{A} 23'51	2°02'26	opposition	-2958 May 10 j 09:59	24° \mathring{A} 00'13	1°50'50
max. Earth dist.	-2967 Oct 21 j 00:45	5° \mathring{A} 23'19	31.26922 AU	min. Earth dist.	-2958 May 10 j 09:12	24° \mathring{A} 00'17	29.21951 AU
retrograde	-2966 Feb 01 j 07:07	7° \mathring{A} 52'15		direct	-2958 Jul 29 j 16:36	22° \mathring{A} 36'51	
opposition	-2966 Apr 22 j 01:33	6° \mathring{A} 29'41	2°10'00	conjunction	-2958 Nov 09 j 16:54	25° \mathring{A} 04'56	1°42'17
min. Earth dist.	-2966 Apr 22 j 07:25	6° \mathring{A} 29'17	29.26964 AU	minimum elong	-2958 Nov 09 j 16:54	25° \mathring{A} 04'56	1°42'15
direct	-2966 Jul 11 j 19:23	5° \mathring{A} 06'02		max. Earth dist.	-2958 Nov 09 j 18:28	25° \mathring{A} 05'04	31.21440 AU
conjunction	-2966 Oct 23 j 15:27	7° \mathring{A} 34'51	2°00'52	retrograde	-2957 Feb 21 j 14:42	27° \mathring{A} 34'32	
minimum elong	-2966 Oct 23 j 15:28	7° \mathring{A} 34'51	2°00'52	opposition	-2957 May 12 j 23:01	26° \mathring{A} 11'17	1°47'41
max. Earth dist.	-2966 Oct 23 j 09:37	7° \mathring{A} 34'18	31.26730 AU	min. Earth dist.	-2957 May 12 j 21:21	26° \mathring{A} 11'24	29.21144 AU
retrograde	-2965 Feb 03 j 19:50	10° \mathring{A} 03'26		direct	-2957 Aug 01 j 04:47	24° \mathring{A} 47'57	
opposition	-2965 Apr 24 j 14:27	8° \mathring{A} 40'50	2°08'13	conjunction	-2957 Nov 12 j 01:55	27° \mathring{A} 15'55	1°39'16
min. Earth dist.	-2965 Apr 24 j 18:55	8° \mathring{A} 40'32	29.26739 AU	minimum elong	-2957 Nov 12 j 01:56	27° \mathring{A} 15'55	1°39'12
direct	-2965 Jul 14 j 05:38	7° \mathring{A} 17'16		max. Earth dist.	-2957 Nov 12 j 03:45	27° \mathring{A} 16'05	31.20688 AU
conjunction	-2965 Oct 26 j 00:40	9° \mathring{A} 46'02	1°59'07	retrograde	-2956 Feb 24 j 02:33	29° \mathring{A} 45'41	
minimum elong	-2965 Oct 26 j 00:41	9° \mathring{A} 46'02	1°59'06	opposition	-2956 May 14 j 11:57	28° \mathring{A} 22'22	1°44'22
max. Earth dist.	-2965 Oct 25 j 20:21	9° \mathring{A} 45'38	31.26453 AU	min. Earth dist.	-2956 May 14 j 08:30	28° \mathring{A} 22'36	29.20435 AU

Attention, astronomical year style is used: The year -2956 in astronomical counting style is the year 2957 BCE in historical counting style.

direct	-2956 Aug 02 j 14:55	26° $\underline{\text{A}}$ 59'03		retrograde	-2948 Mar 13 j 03:34	17° M 19'35	
				opposition	-2948 Jun 01 j 21:12	15° M 55'49	1°12'45
conjunction	-2956 Nov 13 j 11:08	29° $\underline{\text{A}}$ 26'58	1°36'05	min. Earth dist.	-2948 Jun 01 j 11:55	15° M 56'27	29.14371 AU
minimum elong	-2956 Nov 13 j 11:08	29° $\underline{\text{A}}$ 26'58	1°36'03		-2948 Jul 09 j 11:45	15° R M	
max. Earth dist.	-2956 Nov 13 j 14:47	29° $\underline{\text{A}}$ 27'19	31.20021 AU	direct	-2948 Aug 20 j 10:28	14° M 32'54	
	-2956 Nov 28 j 02:12	0° M			-2948 Sep 29 j 17:03	15° M	
retrograde	-2955 Feb 25 j 13:33	1° M 56'54					
opposition	-2955 May 17 j 01:08	0° M 33'31	1°40'54	conjunction	-2948 Nov 30 j 14:51	17° M 00'26	1°06'02
min. Earth dist.	-2955 May 16 j 21:23	0° M 33'46	29.19799 AU	minimum elong	-2948 Nov 30 j 14:51	17° M 00'26	1°05'58
	-2955 Jun 07 j 07:28	30° R $\underline{\text{A}}$		max. Earth dist.	-2948 Dec 01 j 00:07	17° M 01'19	31.13767 AU
direct	-2955 Aug 05 j 01:20	29° $\underline{\text{A}}$ 10'17		retrograde	-2947 Mar 15 j 15:26	19° M 31'41	
	-2955 Sep 29 j 15:12	0° M		opposition	-2947 Jun 04 j 10:21	18° M 07'49	1°08'16
				min. Earth dist.	-2947 Jun 03 j 23:42	18° M 08'32	29.13237 AU
conjunction	-2955 Nov 15 j 20:14	1° M 38'08	1°32'47	direct	-2947 Aug 22 j 21:05	16° M 44'53	
minimum elong	-2955 Nov 15 j 20:15	1° M 38'08	1°32'43				
max. Earth dist.	-2955 Nov 16 j 00:37	1° M 38'33	31.19429 AU	conjunction	-2947 Dec 03 j 00:28	19° M 12'21	1°01'47
retrograde	-2954 Feb 28 j 02:28	4° M 08'14		minimum elong	-2947 Dec 03 j 00:28	19° M 12'21	1°01'42
opposition	-2954 May 19 j 14:10	2° M 44'49	1°37'17	max. Earth dist.	-2947 Dec 03 j 11:16	19° M 13'22	31.12626 AU
min. Earth dist.	-2954 May 19 j 08:20	2° M 45'13	29.19214 AU	retrograde	-2946 Mar 18 j 02:01	21° M 43'44	
direct	-2954 Aug 07 j 11:37	1° M 21'38		opposition	-2946 Jun 06 j 23:30	20° M 19'45	1°03'41
				min. Earth dist.	-2946 Jun 06 j 12:45	20° M 20'29	29.12108 AU
conjunction	-2954 Nov 18 j 05:32	3° M 49'27	1°29'19	direct	-2946 Aug 25 j 07:42	18° M 56'48	
minimum elong	-2954 Nov 18 j 05:33	3° M 49'27	1°29'17				
max. Earth dist.	-2954 Nov 18 j 10:48	3° M 49'57	31.18849 AU	conjunction	-2946 Dec 05 j 10:09	21° M 24'12	0°57'27
retrograde	-2953 Mar 02 j 14:49	6° M 19'45		minimum elong	-2946 Dec 05 j 10:09	21° M 24'12	0°57'23
opposition	-2953 May 22 j 03:12	4° M 56'17	1°33'31	max. Earth dist.	-2946 Dec 05 j 21:40	21° M 25'17	31.11537 AU
min. Earth dist.	-2953 May 21 j 21:37	4° M 56'40	29.18629 AU	retrograde	-2945 Mar 20 j 14:39	23° M 55'43	
direct	-2953 Aug 09 j 22:38	3° M 33'11		opposition	-2945 Jun 09 j 12:18	22° M 31'39	0°59'00
				min. Earth dist.	-2945 Jun 08 j 23:30	22° M 32'31	29.11058 AU
conjunction	-2953 Nov 20 j 14:59	6° M 00'58	1°25'44	direct	-2945 Aug 27 j 18:00	21° M 08'41	
minimum elong	-2953 Nov 20 j 15:00	6° M 00'58	1°25'41				
max. Earth dist.	-2953 Nov 20 j 21:31	6° M 01'35	31.18257 AU	conjunction	-2945 Dec 07 j 19:49	23° M 36'03	0°53'02
retrograde	-2952 Mar 04 j 04:10	8° M 31'26		minimum elong	-2945 Dec 07 j 19:50	23° M 36'03	0°52'57
opposition	-2952 May 23 j 16:19	7° M 07'57	1°29'37	max. Earth dist.	-2945 Dec 08 j 08:14	23° M 37'13	31.10534 AU
min. Earth dist.	-2952 May 23 j 09:01	7° M 08'26	29.17995 AU	retrograde	-2944 Mar 22 j 02:59	26° M 07'43	
direct	-2952 Aug 11 j 11:03	5° M 44'54		opposition	-2944 Jun 11 j 01:24	24° M 43'34	0°54'14
				min. Earth dist.	-2944 Jun 10 j 12:32	24° M 44'26	29.10117 AU
conjunction	-2952 Nov 22 j 00:17	8° M 12'40	1°22'01	direct	-2944 Aug 29 j 04:47	23° M 20'38	
minimum elong	-2952 Nov 22 j 00:18	8° M 12'40	1°21'58				
max. Earth dist.	-2952 Nov 22 j 06:54	8° M 13'17	31.17585 AU	conjunction	-2944 Dec 09 j 05:31	25° M 47'57	0°48'31
retrograde	-2951 Mar 06 j 16:56	10° M 43'19		minimum elong	-2944 Dec 09 j 05:31	25° M 47'57	0°48'27
opposition	-2951 May 26 j 05:39	9° M 19'47	1°25'35	max. Earth dist.	-2944 Dec 09 j 19:36	25° M 49'17	31.09661 AU
min. Earth dist.	-2951 May 25 j 22:26	9° M 20'16	29.17280 AU	retrograde	-2943 Mar 24 j 16:28	28° M 19'46	
direct	-2951 Aug 13 j 21:33	7° M 56'48		opposition	-2943 Jun 13 j 14:22	26° M 55'33	0°49'22
				min. Earth dist.	-2943 Jun 12 j 23:29	26° M 56'34	29.09291 AU
conjunction	-2951 Nov 24 j 09:59	10° M 24'31	1°18'11	direct	-2943 Aug 31 j 16:17	25° M 32'39	
minimum elong	-2951 Nov 24 j 10:00	10° M 24'31	1°18'08				
max. Earth dist.	-2951 Nov 24 j 18:09	10° M 25'17	31.16815 AU	conjunction	-2943 Dec 11 j 15:18	27° M 59'57	0°43'57
retrograde	-2950 Mar 09 j 04:02	12° M 55'20		minimum elong	-2943 Dec 11 j 15:18	27° M 59'57	0°43'52
opposition	-2950 May 28 j 18:47	11° M 31'44	1°21'25	max. Earth dist.	-2943 Dec 12 j 05:37	28° M 01'18	31.08891 AU
min. Earth dist.	-2950 May 28 j 10:26	11° M 32'18	29.16436 AU		-2942 Feb 10 j 12:30	0° A	
direct	-2950 Aug 16 j 10:40	10° M 08'48		retrograde	-2942 Mar 27 j 05:29	0° A 31'56	
					-2942 May 12 j 12:41	30° R M	
conjunction	-2950 Nov 26 j 19:34	12° M 36'28	1°14'14	opposition	-2942 Jun 16 j 03:20	29° M 07'41	0°44'26
minimum elong	-2950 Nov 26 j 19:34	12° M 36'28	1°14'11	min. Earth dist.	-2942 Jun 15 j 12:21	29° M 08'42	29.08573 AU
max. Earth dist.	-2950 Nov 27 j 03:12	12° M 37'12	31.15914 AU	direct	-2942 Sep 03 j 01:55	27° M 44'48	
	-2949 Feb 18 j 07:46	15° M			-2942 Dec 08 j 17:39	0° A	
retrograde	-2949 Mar 11 j 17:00	15° M 07'27					
	-2949 Apr 02 j 08:20	15° R M		conjunction	-2942 Dec 14 j 01:19	0° A 12'06	0°39'18
opposition	-2949 May 31 j 08:01	13° M 43'47	1°17'09	minimum elong	-2942 Dec 14 j 01:19	0° A 12'06	0°39'14
min. Earth dist.	-2949 May 30 j 23:10	13° M 44'23	29.15467 AU	max. Earth dist.	-2942 Dec 14 j 17:29	0° A 13'38	31.08209 AU
direct	-2949 Aug 18 j 21:53	12° M 20'51		retrograde	-2941 Mar 29 j 17:57	2° A 44'15	
				opposition	-2941 Jun 18 j 16:15	1° A 19'57	0°39'26
conjunction	-2949 Nov 29 j 05:16	14° M 48'28	1°10'11	min. Earth dist.	-2941 Jun 17 j 23:55	1° A 21'04	29.07905 AU
minimum elong	-2949 Nov 29 j 05:16	14° M 48'28	1°10'07		-2941 Aug 23 j 12:10	30° R M	
max. Earth dist.	-2949 Nov 29 j 14:33	14° M 49'21	31.14880 AU	direct	-2941 Sep 05 j 14:57	29° M 57'08	
	-2949 Dec 04 j 06:51	15° M			-2941 Sep 18 j 14:17	0° A	

Attention, astronomical year style is used: The year -2941 in astronomical counting style is the year 2942 BCE in historical counting style.

conjunction	-2941 Dec 16 j 11:11	2°♂24'26	0°34'35	desc. node	-2933 Feb 04 j 17:04	19°♂10'12	
minimum elong	-2941 Dec 16 j 11:11	2°♂24'26	0°34'30	retrograde	-2933 Apr 16 j 23:19	20°♂27'00	
max. Earth dist.	-2941 Dec 17 j 03:06	2°♂25'56	31.07563 AU	opposition	-2933 Jul 06 j 23:54	19°♂02'12	0°-2'-11
retrograde	-2940 Mar 31 j 08:26	4°♂56'44		min. Earth dist.	-2933 Jul 06 j 04:15	19°♂03'33	29.00780 AU
opposition	-2940 Jun 20 j 05:18	3°♂32'25	0°34'22	direct	-2933 Sep 23 j 07:06	17°♂39'21	
min. Earth dist.	-2940 Jun 19 j 12:24	3°♂33'34	29.07266 AU				
direct	-2940 Sep 07 j 02:06	2°♂09'38		conjunction	-2932 Jan 02 j 23:30	20°♂06'35	0°-4'-31
				minimum elong	-2932 Jan 02 j 23:30	20°♂06'35	0°04'38
conjunction	-2940 Dec 17 j 21:28	4°♂36'56	0°29'49	behind sun begin	-2932 Jan 02 j 17:12	20°♂06'01	
minimum elong	-2940 Dec 17 j 21:28	4°♂36'56	0°29'44	behind sun end	-2932 Jan 03 j 05:48	20°♂07'09	
max. Earth dist.	-2940 Dec 18 j 15:04	4°♂38'36	31.06910 AU	max. Earth dist.	-2932 Jan 03 j 20:52	20°♂08'36	31.00265 AU
retrograde	-2939 Apr 02 j 19:42	7°♂09'25		retrograde	-2932 Apr 18 j 12:16	22°♂39'54	
opposition	-2939 Jun 22 j 18:20	5°♂45'03	0°29'14	opposition	-2932 Jul 08 j 12:37	21°♂15'02	0°-7'-27
min. Earth dist.	-2939 Jun 22 j 01:07	5°♂46'13	29.06588 AU	min. Earth dist.	-2932 Jul 07 j 15:38	21°♂16'29	28.99823 AU
direct	-2939 Sep 09 j 14:07	4°♂22'19		direct	-2932 Sep 24 j 20:05	19°♂52'11	
conjunction	-2939 Dec 20 j 07:45	6°♂49'36	0°25'00	conjunction	-2931 Jan 04 j 10:15	22°♂19'26	0°-9'-25
minimum elong	-2939 Dec 20 j 07:45	6°♂49'36	0°24'55	minimum elong	-2931 Jan 04 j 10:15	22°♂19'26	0°09'31
max. Earth dist.	-2939 Dec 21 j 01:07	6°♂51'15	31.06207 AU	behind sun begin	-2931 Jan 04 j 04:52	22°♂18'57	
retrograde	-2938 Apr 05 j 08:43	9°♂22'14		behind sun end	-2931 Jan 04 j 15:37	22°♂19'55	
opposition	-2938 Jun 25 j 07:22	7°♂57'50	0°24'04	max. Earth dist.	-2931 Jan 05 j 07:17	22°♂21'25	30.99370 AU
min. Earth dist.	-2938 Jun 24 j 13:15	7°♂59'04	29.05839 AU	retrograde	-2931 Apr 21 j 03:17	24°♂52'52	
direct	-2938 Sep 12 j 01:06	6°♂35'07		min. Earth dist.	-2931 Jul 10 j 03:49	23°♂29'26	28.98998 AU
				opposition	-2931 Jul 11 j 01:19	23°♂27'57	0°-12'-43
conjunction	-2938 Dec 22 j 18:20	9°♂02'25	0°20'09	direct	-2931 Sep 27 j 07:00	22°♂05'06	
minimum elong	-2938 Dec 22 j 18:21	9°♂02'25	0°20'04				
max. Earth dist.	-2938 Dec 23 j 12:32	9°♂04'08	31.05390 AU	conjunction	-2930 Jan 06 j 21:14	24°♂32'23	0°-14'-20
retrograde	-2937 Apr 07 j 20:04	11°♂35'11		minimum elong	-2930 Jan 06 j 21:14	24°♂32'23	0°14'26
opposition	-2937 Jun 27 j 20:20	10°♂10'43	0°18'51	behind sun begin	-2930 Jan 06 j 18:16	24°♂32'07	
min. Earth dist.	-2937 Jun 27 j 02:43	10°♂11'55	29.04962 AU	behind sun end	-2930 Jan 07 j 00:13	24°♂32'40	
direct	-2937 Sep 14 j 12:09	8°♂48'00		max. Earth dist.	-2930 Jan 07 j 19:59	24°♂34'32	30.98593 AU
				retrograde	-2930 Apr 23 j 14:58	27°♂05'58	
conjunction	-2937 Dec 25 j 04:56	11°♂15'17	0°15'16	opposition	-2930 Jul 13 j 13:59	25°♂41'01	0°-17'-58
minimum elong	-2937 Dec 25 j 04:56	11°♂15'17	0°15'11	min. Earth dist.	-2930 Jul 12 j 16:01	25°♂42'32	28.98273 AU
behind sun begin	-2937 Dec 25 j 02:37	11°♂15'04		direct	-2930 Sep 29 j 18:48	24°♂18'12	
behind sun end	-2937 Dec 25 j 07:14	11°♂15'30					
max. Earth dist.	-2937 Dec 25 j 23:18	11°♂17'01	31.04466 AU	conjunction	-2929 Jan 09 j 08:13	26°♂45'31	0°-19'-13
retrograde	-2936 Apr 09 j 09:13	13°♂48'10		minimum elong	-2929 Jan 09 j 08:13	26°♂45'31	0°19'19
opposition	-2936 Jun 29 j 09:19	12°♂23'38	0°13'37	max. Earth dist.	-2929 Jan 10 j 06:51	26°♂47'39	30.97925 AU
min. Earth dist.	-2936 Jun 28 j 14:16	12°♂24'56	29.03977 AU	retrograde	-2929 Apr 26 j 04:52	29°♂19'13	
direct	-2936 Sep 15 j 23:14	11°♂00'54		min. Earth dist.	-2929 Jul 15 j 03:35	27°♂55'51	28.97652 AU
				opposition	-2929 Jul 16 j 02:32	27°♂54'17	0°-23'-12
conjunction	-2936 Dec 26 j 15:25	13°♂28'09	0°10'22	direct	-2929 Oct 02 j 05:53	26°♂31'28	
minimum elong	-2936 Dec 26 j 15:26	13°♂28'09	0°10'18				
behind sun begin	-2936 Dec 26 j 10:18	13°♂27'41		conjunction	-2928 Jan 11 j 19:23	28°♂58'51	0°-24'-6
behind sun end	-2936 Dec 26 j 20:33	13°♂28'37		minimum elong	-2928 Jan 11 j 19:23	28°♂58'51	0°24'13
max. Earth dist.	-2936 Dec 27 j 10:01	13°♂29'55	31.03430 AU	max. Earth dist.	-2928 Jan 12 j 19:04	29°♂01'06	30.97328 AU
retrograde	-2935 Apr 11 j 21:09	16°♂01'10			-2928 Feb 08 j 11:14	0°♂	
opposition	-2935 Jul 01 j 22:24	14°♂36'32	0°08'21	retrograde	-2928 Apr 27 j 17:23	1°♂32'43	
min. Earth dist.	-2935 Jul 01 j 03:58	14°♂37'48	29.02909 AU	opposition	-2928 Jul 17 j 15:17	0°♂07'45	0°-28'-24
direct	-2935 Sep 18 j 09:52	13°♂13'46		min. Earth dist.	-2928 Jul 16 j 16:42	0°♂09'19	28.97084 AU
					-2928 Jul 22 j 08:11	30°♂	
conjunction	-2935 Dec 29 j 02:11	15°♂41'00	0°05'28	direct	-2928 Oct 03 j 16:51	28°♂45'00	
minimum elong	-2935 Dec 29 j 02:10	15°♂41'00	0°05'23		-2928 Dec 11 j 00:19	0°♂	
behind sun begin	-2935 Dec 28 j 19:57	15°♂40'26					
behind sun end	-2935 Dec 29 j 08:23	15°♂41'33		conjunction	-2927 Jan 13 j 06:38	1°♂12'26	0°-28'-57
max. Earth dist.	-2935 Dec 29 j 21:57	15°♂42'52	31.02349 AU	minimum elong	-2927 Jan 13 j 06:38	1°♂12'26	0°29'03
retrograde	-2934 Apr 14 j 10:05	18°♂14'05		max. Earth dist.	-2927 Jan 14 j 06:37	1°♂14'42	30.96780 AU
opposition	-2934 Jul 04 j 11:02	16°♂49'23	0°03'05	retrograde	-2927 Apr 30 j 06:55	3°♂46'26	
min. Earth dist.	-2934 Jul 03 j 15:10	16°♂50'44	29.01820 AU	min. Earth dist.	-2927 Jul 19 j 04:07	2°♂23'07	28.96533 AU
direct	-2934 Sep 20 j 21:17	15°♂26'34		opposition	-2927 Jul 20 j 03:54	2°♂21'28	0°-33'-34
				direct	-2927 Oct 06 j 03:53	0°♂58'44	
conjunction	-2934 Dec 31 j 12:48	17°♂53'48	0°00'29				
minimum elong	-2934 Dec 31 j 12:48	17°♂53'48	0°00'24	conjunction	-2926 Jan 15 j 18:10	3°♂26'14	0°-33'-45
behind sun begin	-2934 Dec 31 j 06:23	17°♂53'13		minimum elong	-2926 Jan 15 j 18:09	3°♂26'14	0°33'52
behind sun end	-2934 Dec 31 j 19:12	17°♂54'22		max. Earth dist.	-2926 Jan 16 j 18:03	3°♂28'29	30.96200 AU
max. Earth dist.	-2933 Jan 01 j 08:22	17°♂55'38	31.01270 AU	retrograde	-2926 May 02 j 18:37	6°♂00'22	

Attention, astronomical year style is used: The year -2926 in astronomical counting style is the year 2927 BCE in historical counting style.

opposition	-2926 Jul 22 j 16:30	4° $\overline{35}$ '24	0°-38'-41	conjunction	-2917 Feb 05 j 05:59	23° $\overline{32}$ '06	-1°-13'-58
min. Earth dist.	-2926 Jul 21 j 17:43	4° $\overline{36}$ '58	28.95933 AU	minimum elong	-2917 Feb 05 j 05:59	23° $\overline{32}$ '06	1°14'03
direct	-2926 Oct 08 j 13:48	3° $\overline{12}$ '40		max. Earth dist.	-2917 Feb 06 j 07:11	23° $\overline{34}$ '29	30.88840 AU
				retrograde	-2917 May 23 j 17:48	26° $\overline{06}$ '45	
conjunction	-2925 Jan 18 j 05:57	5° $\overline{40}$ '14	0°-38'-31	min. Earth dist.	-2917 Aug 11 j 07:59	24° $\overline{42}$ '58	28.88671 AU
minimum elong	-2925 Jan 18 j 05:57	5° $\overline{40}$ '14	0°38'37	opposition	-2917 Aug 12 j 07:36	24° $\overline{41}$ '19	-1°-21'-17
max. Earth dist.	-2925 Jan 19 j 06:30	5° $\overline{42}$ '33	30.95557 AU	direct	-2917 Oct 28 j 20:13	23° $\overline{18}$ '10	
retrograde	-2925 May 05 j 07:51	8° $\overline{14}$ '28					
min. Earth dist.	-2925 Jul 24 j 05:22	6° $\overline{51}$ '07	28.95235 AU	conjunction	-2916 Feb 07 j 18:17	25° $\overline{46}$ '07	-1°-17'-58
opposition	-2925 Jul 25 j 05:04	6° $\overline{49}$ '29	0°-43'-45	minimum elong	-2916 Feb 07 j 18:17	25° $\overline{46}$ '06	1°18'04
direct	-2925 Oct 11 j 00:36	5° $\overline{26}$ '44		max. Earth dist.	-2916 Feb 08 j 20:23	25° $\overline{48}$ '34	30.88362 AU
				retrograde	-2916 May 25 j 07:15	28° $\overline{20}$ '49	
conjunction	-2924 Jan 20 j 17:33	7° $\overline{54}$ '21	0°-43'-13	opposition	-2916 Aug 13 j 19:38	26° $\overline{55}$ '24	-1°-25'-30
minimum elong	-2924 Jan 20 j 17:33	7° $\overline{54}$ '21	0°43'20	min. Earth dist.	-2916 Aug 12 j 18:57	26° $\overline{57}$ '07	28.88241 AU
max. Earth dist.	-2924 Jan 21 j 17:15	7° $\overline{56}$ '35	30.94794 AU	direct	-2916 Oct 30 j 07:10	25° $\overline{32}$ '14	
retrograde	-2924 May 06 j 21:23	10° $\overline{28}$ '41					
opposition	-2924 Jul 26 j 17:50	9° $\overline{03}$ '39	0°-48'-45	conjunction	-2915 Feb 09 j 06:46	28° $\overline{00}$ '17	-1°-21'-51
min. Earth dist.	-2924 Jul 25 j 19:01	9° $\overline{05}$ '14	28.94422 AU	minimum elong	-2915 Feb 09 j 06:46	28° $\overline{00}$ '17	1°21'56
direct	-2924 Oct 12 j 10:30	7° $\overline{40}$ '52		max. Earth dist.	-2915 Feb 10 j 08:07	28° $\overline{02}$ '40	30.87967 AU
					-2915 Apr 10 j 18:40	0° \approx	
conjunction	-2923 Jan 22 j 05:34	10° $\overline{08}$ '30	0°-47'-52	retrograde	-2915 May 27 j 20:14	0° \approx 35'04	
minimum elong	-2923 Jan 22 j 05:34	10° $\overline{08}$ '30	0°47'58		-2915 Jul 15 j 03:24	30° \overline{R} $\overline{3}$	
max. Earth dist.	-2923 Jan 23 j 06:15	10° $\overline{10}$ '50	30.93923 AU	min. Earth dist.	-2915 Aug 15 j 08:00	29° $\overline{11}$ '19	28.87889 AU
retrograde	-2923 May 09 j 10:32	12° $\overline{42}$ '53		opposition	-2915 Aug 16 j 07:41	29° $\overline{09}$ '40	-1°-29'-36
min. Earth dist.	-2923 Jul 28 j 06:58	11° $\overline{19}$ '24	28.93500 AU	direct	-2915 Nov 01 j 16:34	27° $\overline{46}$ '30	
opposition	-2923 Jul 29 j 06:17	11° $\overline{17}$ '47	0°-53'-41		-2914 Feb 05 j 07:53	0° \approx	
direct	-2923 Oct 14 j 23:33	9° $\overline{54}$ '57					
				conjunction	-2914 Feb 11 j 19:36	0° \approx 14'39	-1°-25'-37
conjunction	-2922 Jan 24 j 17:27	12° $\overline{22}$ '37	0°-52'-26	minimum elong	-2914 Feb 11 j 19:36	0° \approx 14'39	1°25'44
minimum elong	-2922 Jan 24 j 17:27	12° $\overline{22}$ '37	0°52'33	max. Earth dist.	-2914 Feb 12 j 21:53	0° \approx 17'08	30.87622 AU
max. Earth dist.	-2922 Jan 25 j 17:03	12° $\overline{24}$ '50	30.92968 AU	retrograde	-2914 May 30 j 09:13	2° \approx 49'30	
retrograde	-2922 May 12 j 01:12	14° $\overline{57}$ '02		opposition	-2914 Aug 18 j 19:38	1° \approx 24'08	-1°-33'-33
opposition	-2922 Jul 31 j 18:44	13° $\overline{31}$ '52	0°-58'-31	min. Earth dist.	-2914 Aug 17 j 19:39	1° \approx 25'49	28.87543 AU
min. Earth dist.	-2922 Jul 30 j 19:39	13° $\overline{33}$ '27	28.92531 AU	direct	-2914 Nov 04 j 04:40	0° \approx 00'59	
direct	-2922 Oct 17 j 10:34	12° $\overline{08}$ '56					
				conjunction	-2913 Feb 14 j 08:21	2° \approx 29'15	-1°-29'-15
conjunction	-2921 Jan 27 j 05:27	14° $\overline{36}$ '37	0°-56'-55	minimum elong	-2913 Feb 14 j 08:21	2° \approx 29'15	1°29'21
minimum elong	-2921 Jan 27 j 05:27	14° $\overline{36}$ '37	0°57'02	max. Earth dist.	-2913 Feb 15 j 09:12	2° \approx 31'35	30.87258 AU
max. Earth dist.	-2921 Jan 28 j 06:13	14° $\overline{38}$ '58	30.91978 AU	retrograde	-2913 Jun 01 j 23:49	5° \approx 04'10	
retrograde	-2921 May 14 j 13:03	17° $\overline{11}$ '05		min. Earth dist.	-2913 Aug 20 j 08:18	3° \approx 40'27	28.87165 AU
min. Earth dist.	-2921 Aug 02 j 07:52	15° $\overline{47}$ '26	28.91555 AU	opposition	-2913 Aug 21 j 07:40	3° \approx 38'49	-1°-37'-22
opposition	-2921 Aug 03 j 06:59	15° $\overline{45}$ '49	-1°-3'-17	direct	-2913 Nov 06 j 14:54	2° \approx 15'37	
direct	-2921 Oct 19 j 22:39	14° $\overline{22}$ '50					
				conjunction	-2912 Feb 16 j 21:28	4° \approx 44'00	-1°-32'-45
conjunction	-2920 Jan 29 j 17:26	16° $\overline{50}$ '32	-1°-1'-20	minimum elong	-2912 Feb 16 j 21:27	4° \approx 44'00	1°32'52
minimum elong	-2920 Jan 29 j 17:26	16° $\overline{50}$ '32	1°01'27	max. Earth dist.	-2912 Feb 17 j 22:55	4° \approx 46'24	30.86832 AU
max. Earth dist.	-2920 Jan 30 j 17:43	16° $\overline{52}$ '50	30.91038 AU	retrograde	-2912 Jun 03 j 12:41	7° \approx 18'58	
retrograde	-2920 May 16 j 04:01	19° $\overline{25}$ '02		opposition	-2912 Aug 22 j 19:39	5° \approx 53'37	-1°-41'-2
opposition	-2920 Aug 04 j 19:14	17° $\overline{59}$ '42	-1°-7'-56	min. Earth dist.	-2912 Aug 21 j 20:48	5° \approx 55'13	28.86698 AU
min. Earth dist.	-2920 Aug 03 j 19:28	18° $\overline{01}$ '21	28.90664 AU	direct	-2912 Nov 08 j 02:38	4° \approx 30'24	
direct	-2920 Oct 21 j 10:46	16° $\overline{36}$ '38					
				conjunction	-2911 Feb 18 j 10:33	6° \approx 58'52	-1°-36'-7
conjunction	-2919 Jan 31 j 05:29	19° $\overline{04}$ '23	-1°-5'-38	minimum elong	-2911 Feb 18 j 10:32	6° \approx 58'52	1°36'12
minimum elong	-2919 Jan 31 j 05:29	19° $\overline{04}$ '23	1°05'44	max. Earth dist.	-2911 Feb 19 j 10:41	7° \approx 01'08	30.86324 AU
max. Earth dist.	-2919 Feb 01 j 06:37	19° $\overline{06}$ '46	30.90180 AU	retrograde	-2911 Jun 06 j 04:28	9° \approx 33'50	
retrograde	-2919 May 18 j 16:31	21° $\overline{38}$ '55		min. Earth dist.	-2911 Aug 24 j 08:51	8° \approx 10'04	28.86149 AU
min. Earth dist.	-2919 Aug 06 j 08:14	20° $\overline{15}$ '09	28.89870 AU	opposition	-2911 Aug 25 j 07:36	8° \approx 08'28	-1°-44'-33
opposition	-2919 Aug 07 j 07:29	20° $\overline{13}$ '32	-1°-12'-30	direct	-2911 Nov 10 j 15:12	6° \approx 45'12	
direct	-2919 Oct 23 j 22:37	18° $\overline{50}$ '26					
				conjunction	-2910 Feb 20 j 23:49	9° \approx 13'45	-1°-39'-20
conjunction	-2918 Feb 02 j 17:45	21° $\overline{18}$ '13	-1°-9'-51	minimum elong	-2910 Feb 20 j 23:49	9° \approx 13'45	1°39'26
minimum elong	-2918 Feb 02 j 17:44	21° $\overline{18}$ '13	1°09'57	max. Earth dist.	-2910 Feb 22 j 00:02	9° \approx 16'02	30.85723 AU
max. Earth dist.	-2918 Feb 03 j 18:58	21° $\overline{20}$ '36	30.89451 AU	retrograde	-2910 Jun 08 j 17:02	11° \approx 48'43	
retrograde	-2918 May 21 j 05:57	23° $\overline{52}$ '48		opposition	-2910 Aug 27 j 19:23	10° \approx 23'19	-1°-47'-55
opposition	-2918 Aug 09 j 19:25	22° $\overline{27}$ '23	-1°-16'-57	min. Earth dist.	-2910 Aug 26 j 21:50	10° \approx 24'49	28.85527 AU
min. Earth dist.	-2918 Aug 08 j 19:01	22° $\overline{29}$ '05	28.89209 AU	direct	-2910 Nov 13 j 03:29	8° \approx 59'58	
direct	-2918 Oct 26 j 10:10	21° $\overline{04}$ '14					

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Attention, astronomical year style is used: The year -2909 in astronomical counting style is the year 2910 BCE in historical counting style.

conjunction	-2909 Feb 23 j 13:01	11° \approx 28'35	-1°-42'-24	conjunction	-2901 Mar 14 j 00:53	29° \approx 26'35	-2°-1'00
minimum elong	-2909 Feb 23 j 13:01	11° \approx 28'35	1°42'29	minimum elong	-2901 Mar 14 j 00:53	29° \approx 26'35	2°01'03
max. Earth dist.	-2909 Feb 24 j 12:40	11° \approx 30'49	30.85098 AU	max. Earth dist.	-2901 Mar 14 j 22:36	29° \approx 28'37	30.83434 AU
retrograde	-2909 Jun 11 j 07:03	14° \approx 03'31			-2901 Mar 28 j 23:46	0° \approx	
min. Earth dist.	-2909 Aug 29 j 08:55	12° \approx 39'39	28.84908 AU	retrograde	-2901 Jun 29 j 13:25	2° \approx 01'19	
opposition	-2909 Aug 30 j 07:03	12° \approx 38'05	-1°-51'-7	min. Earth dist.	-2901 Sep 16 j 07:58	0° \approx 37'19	28.83657 AU
direct	-2909 Nov 15 j 15:46	11° \approx 14'40		opposition	-2901 Sep 17 j 02:32	0° \approx 36'01	-2°-10'-14
					-2901 Oct 09 j 00:24	30° \approx	
conjunction	-2908 Feb 26 j 02:05	13° \approx 43'20	-1°-45'-19	direct	-2901 Dec 03 j 08:46	29° \approx 12'17	
minimum elong	-2908 Feb 26 j 02:05	13° \approx 43'20	1°45'24		-2900 Jan 26 j 02:27	0° \approx	
max. Earth dist.	-2908 Feb 27 j 01:20	13° \approx 45'32	30.84486 AU				
	-2908 Apr 01 j 14:22	15° \approx		conjunction	-2900 Mar 15 j 14:49	1° \approx 41'44	-2°-2'-31
retrograde	-2908 Jun 12 j 19:26	16° \approx 18'15		minimum elong	-2900 Mar 15 j 14:49	1° \approx 41'44	2°02'35
	-2908 Aug 27 j 12:13	15° \approx		max. Earth dist.	-2900 Mar 16 j 11:25	1° \approx 43'39	30.83561 AU
opposition	-2908 Aug 31 j 18:49	14° \approx 52'47	-1°-54'-8	retrograde	-2900 Jul 01 j 04:30	4° \approx 16'25	
min. Earth dist.	-2908 Aug 30 j 21:52	14° \approx 54'16	28.84339 AU	opposition	-2900 Sep 18 j 13:52	2° \approx 51'09	-2°-11'-46
direct	-2908 Nov 17 j 02:44	13° \approx 29'18		min. Earth dist.	-2900 Sep 17 j 19:13	2° \approx 52'28	28.83750 AU
	-2907 Feb 01 j 06:24	15° \approx		direct	-2900 Dec 04 j 21:16	1° \approx 27'23	
conjunction	-2907 Feb 27 j 15:27	15° \approx 58'02	-1°-48'-4				
minimum elong	-2907 Feb 27 j 15:27	15° \approx 58'02	1°48'08				
max. Earth dist.	-2907 Feb 28 j 15:05	16° \approx 00'15	30.83962 AU				
retrograde	-2907 Jun 15 j 09:12	18° \approx 32'54					
min. Earth dist.	-2907 Sep 02 j 08:29	17° \approx 08'57	28.83870 AU				
opposition	-2907 Sep 03 j 06:10	17° \approx 07'25	-1°-56'-59				
direct	-2907 Nov 19 j 14:22	15° \approx 43'51					
conjunction	-2906 Mar 02 j 04:46	18° \approx 12'40	-1°-50'-39				
minimum elong	-2906 Mar 02 j 04:46	18° \approx 12'40	1°50'44				
max. Earth dist.	-2906 Mar 03 j 03:25	18° \approx 14'48	30.83547 AU				
retrograde	-2906 Jun 17 j 20:34	20° \approx 47'31					
opposition	-2906 Sep 05 j 17:44	19° \approx 22'01	-1°-59'-40				
min. Earth dist.	-2906 Sep 04 j 21:06	19° \approx 23'28	28.83537 AU				
direct	-2906 Nov 22 j 00:23	17° \approx 58'24					
conjunction	-2905 Mar 04 j 18:09	20° \approx 27'17	-1°-53'-4				
minimum elong	-2905 Mar 04 j 18:08	20° \approx 27'17	1°53'08				
max. Earth dist.	-2905 Mar 05 j 17:43	20° \approx 29'30	30.83278 AU				
retrograde	-2905 Jun 20 j 08:14	23° \approx 02'07					
min. Earth dist.	-2905 Sep 07 j 08:01	21° \approx 38'07	28.83343 AU				
opposition	-2905 Sep 08 j 05:07	21° \approx 36'37	-2°-2'-10				
direct	-2905 Nov 24 j 12:08	20° \approx 12'58					
conjunction	-2904 Mar 06 j 07:32	22° \approx 41'57	-1°-55'-19				
minimum elong	-2904 Mar 06 j 07:32	22° \approx 41'57	1°55'24				
max. Earth dist.	-2904 Mar 07 j 05:46	22° \approx 44'02	30.83162 AU				
retrograde	-2904 Jun 21 j 21:59	25° \approx 16'45					
opposition	-2904 Sep 09 j 16:31	23° \approx 51'18	-2°-4'-28				
min. Earth dist.	-2904 Sep 08 j 19:55	23° \approx 52'45	28.83308 AU				
direct	-2904 Nov 25 j 21:33	22° \approx 27'36					
conjunction	-2903 Mar 08 j 21:14	24° \approx 56'42	-1°-57'-24				
minimum elong	-2903 Mar 08 j 21:14	24° \approx 56'42	1°57'27				
max. Earth dist.	-2903 Mar 09 j 20:14	24° \approx 58'51	30.83181 AU				
retrograde	-2903 Jun 24 j 10:09	27° \approx 31'29					
min. Earth dist.	-2903 Sep 11 j 07:44	26° \approx 07'29	28.83374 AU				
opposition	-2903 Sep 12 j 03:53	26° \approx 06'04	-2°-6'-35				
direct	-2903 Nov 28 j 09:08	24° \approx 42'22					
conjunction	-2902 Mar 11 j 10:57	27° \approx 11'34	-1°-59'-17				
minimum elong	-2902 Mar 11 j 10:57	27° \approx 11'34	1°59'22				
max. Earth dist.	-2902 Mar 12 j 08:36	27° \approx 13'36	30.83293 AU				
retrograde	-2902 Jun 27 j 01:01	29° \approx 46'20					
opposition	-2902 Sep 14 j 15:07	28° \approx 20'58	-2°-8'-31				
min. Earth dist.	-2902 Sep 13 j 19:09	28° \approx 22'23	28.83516 AU				
direct	-2902 Nov 30 j 21:04	26° \approx 57'15					

Attention, astronomical year style is used: The year -2900 in astronomical counting style is the year 2901 BCE in historical counting style.

	-2900 Jan 26 j 02:27	0° ✕		conjunction	-2892 Apr 03 j 08:27	19° ✕ 41'53	-2°-7'-53
				minimum elong	-2892 Apr 03 j 08:27	19° ✕ 41'53	2°07'56
conjunction	-2900 Mar 15 j 14:49	1° ✕ 41'44	-2°-2'-31	max. Earth dist.	-2892 Apr 03 j 23:25	19° ✕ 43'17	30.83522 AU
minimum elong	-2900 Mar 15 j 14:49	1° ✕ 41'44	2°02'35	retrograde	-2892 Jul 19 j 08:27	22° ✕ 15'50	
max. Earth dist.	-2900 Mar 16 j 11:25	1° ✕ 43'39	30.83561 AU	opposition	-2892 Oct 06 j 06:19	20° ✕ 50'45	-2°-16'-40
retrograde	-2900 Jul 01 j 04:30	4° ✕ 16'25		min. Earth dist.	-2892 Oct 05 j 17:54	20° ✕ 51'38	28.83850 AU
opposition	-2900 Sep 18 j 13:52	2° ✕ 51'09	-2°-11'-46	direct	-2892 Dec 22 j 17:33	19° ✕ 26'30	
min. Earth dist.	-2900 Sep 17 j 19:13	2° ✕ 52'28	28.83750 AU				
direct	-2900 Dec 04 j 21:16	1° ✕ 27'23		conjunction	-2891 Apr 05 j 22:47	21° ✕ 56'46	-2°-7'-41
				minimum elong	-2891 Apr 05 j 22:47	21° ✕ 56'46	2°07'42
conjunction	-2899 Mar 18 j 05:01	3° ✕ 56'56	-2°-3'-52	max. Earth dist.	-2891 Apr 06 j 12:37	21° ✕ 58'03	30.83898 AU
minimum elong	-2899 Mar 18 j 05:01	3° ✕ 56'56	2°03'54	retrograde	-2891 Jul 21 j 22:58	24° ✕ 30'38	
max. Earth dist.	-2899 Mar 19 j 00:32	3° ✕ 58'46	30.83599 AU	opposition	-2891 Oct 08 j 16:59	23° ✕ 05'37	-2°-16'-21
retrograde	-2899 Jul 03 j 17:46	6° ✕ 31'34		min. Earth dist.	-2891 Oct 08 j 04:19	23° ✕ 06'32	28.84280 AU
min. Earth dist.	-2899 Sep 20 j 08:24	5° ✕ 07'31	28.83749 AU	direct	-2891 Dec 25 j 06:00	21° ✕ 41'22	
opposition	-2899 Sep 21 j 01:12	5° ✕ 06'20	-2°-13'-6				
direct	-2899 Dec 07 j 08:52	3° ✕ 42'31		conjunction	-2890 Apr 08 j 13:10	24° ✕ 11'45	-2°-7'-17
				minimum elong	-2890 Apr 08 j 13:10	24° ✕ 11'45	2°07'19
conjunction	-2898 Mar 20 j 19:20	6° ✕ 12'09	-2°-5'-1	max. Earth dist.	-2890 Apr 09 j 02:22	24° ✕ 12'59	30.84373 AU
minimum elong	-2898 Mar 20 j 19:20	6° ✕ 12'09	2°05'04	retrograde	-2890 Jul 24 j 12:08	26° ✕ 45'32	
max. Earth dist.	-2898 Mar 21 j 14:17	6° ✕ 13'56	30.83560 AU	opposition	-2890 Oct 11 j 03:53	25° ✕ 20'37	-2°-15'-49
retrograde	-2898 Jul 06 j 07:46	8° ✕ 46'42		min. Earth dist.	-2890 Oct 10 j 16:53	25° ✕ 21'23	28.84796 AU
opposition	-2898 Sep 23 j 12:24	7° ✕ 21'28	-2°-14'-14	direct	-2890 Dec 27 j 17:54	23° ✕ 56'21	
min. Earth dist.	-2898 Sep 22 j 19:28	7° ✕ 22'40	28.83664 AU				
direct	-2898 Dec 09 j 21:41	5° ✕ 57'35		conjunction	-2889 Apr 11 j 03:29	26° ✕ 26'51	-2°-6'-41
				minimum elong	-2889 Apr 11 j 03:30	26° ✕ 26'51	2°06'43
conjunction	-2897 Mar 23 j 09:20	8° ✕ 27'18	-2°-5'-58	max. Earth dist.	-2889 Apr 11 j 16:08	26° ✕ 28'02	30.84923 AU
minimum elong	-2897 Mar 23 j 09:20	8° ✕ 27'18	2°06'01	retrograde	-2889 Jul 27 j 02:00	29° ✕ 00'34	
max. Earth dist.	-2897 Mar 24 j 02:45	8° ✕ 28'56	30.83443 AU	opposition	-2889 Oct 13 j 14:38	27° ✕ 35'44	-2°-15'-4
retrograde	-2897 Jul 08 j 19:30	11° ✕ 01'46		min. Earth dist.	-2889 Oct 13 j 03:31	27° ✕ 36'31	28.85343 AU
opposition	-2897 Sep 25 j 23:41	9° ✕ 36'32	-2°-15'-9	direct	-2889 Dec 30 j 07:10	26° ✕ 11'28	
min. Earth dist.	-2897 Sep 25 j 08:21	9° ✕ 37'38	28.83538 AU				
direct	-2897 Dec 12 j 08:21	8° ✕ 12'35		conjunction	-2888 Apr 12 j 18:03	28° ✕ 42'05	-2°-5'-54
				minimum elong	-2888 Apr 12 j 18:03	28° ✕ 42'05	2°05'55
conjunction	-2896 Mar 24 j 23:38	10° ✕ 42'22	-2°-6'-45	max. Earth dist.	-2888 Apr 13 j 05:00	28° ✕ 43'07	30.85459 AU
minimum elong	-2896 Mar 24 j 23:38	10° ✕ 42'22	2°06'48		-2888 May 19 j 04:10	0° °	
max. Earth dist.	-2896 Mar 25 j 17:18	10° ✕ 44'01	30.83316 AU	retrograde	-2888 Jul 28 j 14:31	1° ° 15'42	
retrograde	-2896 Jul 10 j 07:30	13° ✕ 16'43			-2888 Oct 09 j 17:50	30° ° ✕	
opposition	-2896 Sep 27 j 10:38	11° ✕ 51'30	-2°-15'-52	opposition	-2888 Oct 15 j 01:26	29° ✕ 50'57	-2°-14'-7
min. Earth dist.	-2896 Sep 26 j 19:27	11° ✕ 52'35	28.83414 AU	min. Earth dist.	-2888 Oct 14 j 16:15	29° ✕ 51'36	28.85862 AU
direct	-2896 Dec 13 j 20:34	10° ✕ 27'28		direct	-2888 Dec 31 j 17:47	28° ✕ 26'40	
					-2887 Mar 20 j 02:28	0° °	
conjunction	-2895 Mar 27 j 13:49	12° ✕ 57'20	-2°-7'-19				
minimum elong	-2895 Mar 27 j 13:49	12° ✕ 57'20	2°07'22	conjunction	-2887 Apr 15 j 08:51	0° ° 57'23	-2°-4'-55
max. Earth dist.	-2895 Mar 28 j 05:37	12° ✕ 58'49	30.83217 AU	minimum elong	-2887 Apr 15 j 08:51	0° ° 57'23	2°04'55
retrograde	-2895 Jul 12 j 20:28	15° ✕ 31'35		max. Earth dist.	-2887 Apr 15 j 19:27	0° ° 58'23	30.85940 AU
opposition	-2895 Sep 29 j 21:40	14° ✕ 06'22	-2°-16'-23	retrograde	-2887 Jul 31 j 03:49	3° ° 30'52	
min. Earth dist.	-2895 Sep 29 j 07:23	14° ✕ 07'23	28.83356 AU	opposition	-2887 Oct 17 j 12:13	2° ° 06'11	-2°-12'-57
direct	-2895 Dec 16 j 06:25	12° ✕ 42'16		min. Earth dist.	-2887 Oct 17 j 03:34	2° ° 06'48	28.86283 AU
				direct	-2886 Jan 03 j 06:35	0° ° 41'52	
conjunction	-2894 Mar 30 j 04:06	15° ✕ 12'13	-2°-7'-42				
minimum elong	-2894 Mar 30 j 04:07	15° ✕ 12'13	2°07'45	conjunction	-2886 Apr 17 j 23:26	3° ° 12'41	-2°-3'-44
max. Earth dist.	-2894 Mar 30 j 20:22	15° ✕ 13'44	30.83193 AU	minimum elong	-2886 Apr 17 j 23:26	3° ° 12'41	2°03'45
retrograde	-2894 Jul 15 j 07:21	17° ✕ 46'21		max. Earth dist.	-2886 Apr 18 j 07:39	3° ° 13'27	30.86313 AU
opposition	-2894 Oct 02 j 08:31	16° ✕ 21'11	-2°-16'-41	retrograde	-2886 Aug 02 j 16:10	5° ° 46'01	
min. Earth dist.	-2894 Oct 01 j 18:48	16° ✕ 22'09	28.83382 AU	opposition	-2886 Oct 19 j 23:00	4° ° 21'23	-2°-11'-36
direct	-2894 Dec 18 j 18:19	14° ✕ 57'01		min. Earth dist.	-2886 Oct 19 j 15:42	4° ° 21'54	28.86610 AU
				direct	-2885 Jan 05 j 16:58	2° ° 56'59	
conjunction	-2893 Apr 01 j 18:14	17° ✕ 27'03	-2°-7'-54				
minimum elong	-2893 Apr 01 j 18:14	17° ✕ 27'03	2°07'56	conjunction	-2885 Apr 20 j 14:10	5° ° 27'52	-2°-2'-23
max. Earth dist.	-2893 Apr 02 j 08:56	17° ✕ 28'25	30.83290 AU	minimum elong	-2885 Apr 20 j 14:10	5° ° 27'52	2°02'23
retrograde	-2893 Jul 17 j 20:55	20° ✕ 01'06		max. Earth dist.	-2885 Apr 20 j 22:14	5° ° 28'37	30.86597 AU
opposition	-2893 Oct 04 j 19:23	18° ✕ 35'57	-2°-16'-47	retrograde	-2885 Aug 05 j 02:23	8° ° 01'03	
min. Earth dist.	-2893 Oct 04 j 05:45	18° ✕ 36'55	28.83552 AU	opposition	-2885 Oct 22 j 09:41	6° ° 36'26	-2°-10'-3
direct	-2893 Dec 21 j 06:07	17° ✕ 11'44		min. Earth dist.	-2885 Oct 22 j 03:26	6° ° 36'52	28.86849 AU

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Attention, astronomical year style is used: The year -2884 in astronomical counting style is the year 2885 BCE in historical counting style.

direct	-2884 Jan 08 j 05:34	5°♈11'58		minimum elong	-2876 May 10 j 23:51	25°♈37'50	1°42'11
				max. Earth dist.	-2876 May 10 j 23:55	25°♈37'50	30.91065 AU
conjunction	-2884 Apr 22 j 04:39	7°♈42'53	-2°00'-50	retrograde	-2876 Aug 24 j 13:50	28°♈09'36	
minimum elong	-2884 Apr 22 j 04:39	7°♈42'53	2°00'51	opposition	-2876 Nov 10 j 07:28	26°♈45'31	-1°-47'-40
max. Earth dist.	-2884 Apr 22 j 10:30	7°♈43'25	30.86824 AU	min. Earth dist.	-2876 Nov 10 j 08:20	26°♈45'27	28.91589 AU
retrograde	-2884 Aug 06 j 14:44	10°♈15'53		direct	-2875 Jan 27 j 18:05	25°♈20'39	
opposition	-2884 Oct 23 j 20:16	8°♈51'17	-2°-8'-18				
min. Earth dist.	-2884 Oct 23 j 14:37	8°♈51'42	28.87057 AU	conjunction	-2875 May 13 j 14:12	27°♈52'14	-1°-39'-9
direct	-2883 Jan 09 j 17:08	7°♈26'44		minimum elong	-2875 May 13 j 14:13	27°♈52'14	1°39'07
				max. Earth dist.	-2875 May 13 j 11:54	27°♈52'02	30.91923 AU
conjunction	-2883 Apr 24 j 19:20	9°♈57'42	-1°-59'-7		-2875 Jul 20 j 05:07	0°♈	
minimum elong	-2883 Apr 24 j 19:20	9°♈57'42	1°59'07	retrograde	-2875 Aug 27 j 02:16	0°♈23'52	
max. Earth dist.	-2883 Apr 25 j 01:01	9°♈58'14	30.87025 AU		-2875 Oct 04 j 09:19	30°♈	
retrograde	-2883 Aug 09 j 01:16	12°♈30'31		opposition	-2875 Nov 12 j 17:46	28°♈59'54	-1°-44'-18
opposition	-2883 Oct 26 j 06:47	11°♈05'56	-2°-6'-22	min. Earth dist.	-2875 Nov 12 j 19:17	28°♈59'47	28.92415 AU
min. Earth dist.	-2883 Oct 26 j 02:46	11°♈06'14	28.87263 AU	direct	-2874 Jan 30 j 04:56	27°♈35'01	
direct	-2882 Jan 12 j 04:25	9°♈41'17			-2874 May 13 j 04:41	0°♈	
conjunction	-2882 Apr 27 j 09:47	12°♈12'18	-1°-57'-13	conjunction	-2874 May 16 j 04:42	0°♈06'42	-1°-35'-56
minimum elong	-2882 Apr 27 j 09:47	12°♈12'18	1°57'13	minimum elong	-2874 May 16 j 04:43	0°♈06'42	1°35'54
max. Earth dist.	-2882 Apr 27 j 14:00	12°♈12'41	30.87269 AU	max. Earth dist.	-2874 May 16 j 02:07	0°♈06'27	30.92704 AU
retrograde	-2882 Aug 11 j 13:56	14°♈44'57		retrograde	-2874 Aug 29 j 12:38	2°♈38'11	
opposition	-2882 Oct 28 j 17:12	13°♈20'23	-2°-4'-14	opposition	-2874 Nov 15 j 04:19	1°♈14'17	-1°-40'-47
min. Earth dist.	-2882 Oct 28 j 13:02	13°♈20'41	28.87539 AU	min. Earth dist.	-2874 Nov 15 j 07:39	1°♈14'03	28.93146 AU
direct	-2881 Jan 14 j 17:32	11°♈55'38			-2873 Jan 07 j 08:57	30°♈	
				direct	-2873 Feb 01 j 15:33	29°♈49'23	
conjunction	-2881 Apr 30 j 00:02	14°♈26'42	-1°-55'-8		-2873 Feb 26 j 22:59	0°♈	
minimum elong	-2881 Apr 30 j 00:03	14°♈26'42	1°55'08				
max. Earth dist.	-2881 Apr 30 j 03:45	14°♈27'03	30.87586 AU	conjunction	-2873 May 18 j 18:52	2°♈21'07	-1°-32'-34
retrograde	-2881 Aug 14 j 01:15	16°♈59'11		minimum elong	-2873 May 18 j 18:53	2°♈21'07	1°32'32
opposition	-2881 Oct 31 j 03:45	15°♈34'38	-2°-1'-56	max. Earth dist.	-2873 May 18 j 14:21	2°♈20'41	30.93403 AU
min. Earth dist.	-2881 Oct 31 j 01:09	15°♈34'49	28.87915 AU	retrograde	-2873 Sep 01 j 00:28	4°♈52'26	
direct	-2880 Jan 17 j 05:49	14°♈09'50		opposition	-2873 Nov 17 j 14:39	3°♈28'36	-1°-37'-7
				min. Earth dist.	-2873 Nov 17 j 18:09	3°♈28'21	28.93792 AU
conjunction	-2880 May 01 j 14:27	16°♈40'58	-1°-52'-54	direct	-2872 Feb 04 j 04:48	2°♈03'39	
minimum elong	-2880 May 01 j 14:27	16°♈40'58	1°52'53				
max. Earth dist.	-2880 May 01 j 17:29	16°♈41'15	30.88038 AU	conjunction	-2872 May 20 j 09:15	4°♈35'26	-1°-29'-5
retrograde	-2880 Aug 15 j 14:04	19°♈13'16		minimum elong	-2872 May 20 j 09:15	4°♈35'26	1°29'03
opposition	-2880 Nov 01 j 13:58	17°♈48'47	-1°-59'-26	max. Earth dist.	-2872 May 20 j 03:52	4°♈34'56	30.94010 AU
min. Earth dist.	-2880 Nov 01 j 11:03	17°♈48'59	28.88424 AU	retrograde	-2872 Sep 02 j 10:55	7°♈06'35	
direct	-2879 Jan 18 j 19:24	16°♈23'56		opposition	-2872 Nov 19 j 00:58	5°♈42'47	-1°-33'-19
				min. Earth dist.	-2872 Nov 19 j 06:29	5°♈42'24	28.94367 AU
conjunction	-2879 May 04 j 04:49	18°♈55'08	-1°-50'-28	direct	-2871 Feb 05 j 17:04	4°♈17'47	
minimum elong	-2879 May 04 j 04:49	18°♈55'08	1°50'28				
max. Earth dist.	-2879 May 04 j 06:35	18°♈55'18	30.88620 AU	conjunction	-2871 May 22 j 23:31	6°♈49'36	-1°-25'-27
retrograde	-2879 Aug 18 j 02:17	21°♈27'17		minimum elong	-2871 May 22 j 23:31	6°♈49'36	1°25'26
opposition	-2879 Nov 04 j 00:27	20°♈02'52	-1°-56'-45	max. Earth dist.	-2871 May 22 j 16:57	6°♈48'59	30.94577 AU
min. Earth dist.	-2879 Nov 03 j 22:59	20°♈02'59	28.89080 AU	retrograde	-2871 Sep 04 j 23:02	9°♈20'33	
direct	-2878 Jan 21 j 06:20	18°♈38'00		opposition	-2871 Nov 21 j 11:13	7°♈56'48	-1°-29'-23
				min. Earth dist.	-2871 Nov 21 j 16:42	7°♈56'25	28.94911 AU
conjunction	-2878 May 06 j 19:08	21°♈09'17	-1°-47'-53	direct	-2870 Feb 08 j 06:51	6°♈31'43	
minimum elong	-2878 May 06 j 19:09	21°♈09'17	1°47'52				
max. Earth dist.	-2878 May 06 j 21:01	21°♈09'28	30.89349 AU	conjunction	-2870 May 25 j 13:28	9°♈03'34	-1°-21'-43
retrograde	-2878 Aug 20 j 15:06	23°♈41'18		minimum elong	-2870 May 25 j 13:28	9°♈03'34	1°21'40
opposition	-2878 Nov 06 j 10:46	22°♈17'00	-1°-53'-54	max. Earth dist.	-2870 May 25 j 05:36	9°♈02'50	30.95124 AU
min. Earth dist.	-2878 Nov 06 j 09:27	22°♈17'05	28.89853 AU	retrograde	-2870 Sep 07 j 10:37	11°♈34'19	
direct	-2877 Jan 23 j 19:25	20°♈52'08		opposition	-2870 Nov 23 j 21:31	10°♈10'36	-1°-25'-19
				min. Earth dist.	-2870 Nov 24 j 04:35	10°♈10'06	28.95479 AU
conjunction	-2877 May 09 j 09:23	23°♈23'31	-1°-45'-8	direct	-2869 Feb 10 j 18:30	8°♈45'28	
minimum elong	-2877 May 09 j 09:23	23°♈23'31	1°45'07				
max. Earth dist.	-2877 May 09 j 09:24	23°♈23'31	30.90181 AU	conjunction	-2869 May 28 j 03:27	11°♈17'20	-1°-17'-51
retrograde	-2877 Aug 23 j 03:16	25°♈55'24		minimum elong	-2869 May 28 j 03:28	11°♈17'20	1°17'49
opposition	-2877 Nov 08 j 21:04	24°♈31'12	-1°-50'-52	max. Earth dist.	-2869 May 27 j 19:31	11°♈16'35	30.95727 AU
min. Earth dist.	-2877 Nov 08 j 20:50	24°♈31'13	28.90722 AU	retrograde	-2869 Sep 09 j 22:51	13°♈47'53	
direct	-2876 Jan 26 j 05:45	23°♈06'20		opposition	-2869 Nov 26 j 07:36	12°♈24'12	-1°-21'-8
				min. Earth dist.	-2869 Nov 26 j 14:53	12°♈23'41	28.96110 AU
conjunction	-2876 May 10 j 23:50	25°♈37'50	-1°-42'-13	direct	-2868 Feb 13 j 08:55	10°♈59'01	

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Attention, astronomical year style is used: The year -2868 in astronomical counting style is the year 2869 BCE in historical counting style.

conjunction	-2868 May 29 j 17:16	13° 8 30'53	-1°-13'-53	direct	-2860 Mar 02 j 06:59	28° 8 45'15	
minimum elong	-2868 May 29 j 17:16	13° 8 30'53	1°13'50		-2860 May 11 j 19:34	0° II	
max. Earth dist.	-2868 May 29 j 07:39	13° 8 30'00	30.96413 AU				
	-2868 Jul 11 j 08:20	15° 8		conjunction	-2860 Jun 17 j 06:26	1° II 17'27	0°-38'-39
retrograde	-2868 Sep 11 j 10:02	16° 8 01'15		minimum elong	-2860 Jun 17 j 06:27	1° II 17'27	0°38'36
	-2868 Nov 14 j 10:14	15° 8		max. Earth dist.	-2860 Jun 16 j 14:47	1° II 16'00	31.04558 AU
opposition	-2868 Nov 27 j 17:48	14° 8 37'38	-1°-16'-49	retrograde	-2860 Sep 29 j 01:32	3° II 46'34	
min. Earth dist.	-2868 Nov 28 j 01:51	14° 8 37'03	28.96857 AU	opposition	-2860 Dec 15 j 04:05	2° II 23'39	0°-38'-49
direct	-2867 Feb 14 j 20:28	13° 8 12'23		min. Earth dist.	-2860 Dec 15 j 18:19	2° II 22'39	29.04983 AU
	-2867 May 12 j 03:07	15° 8		direct	-2859 Mar 04 j 21:35	0° II 58'23	
conjunction	-2867 Jun 01 j 07:08	15° 8 44'18	-1°-9'-48	conjunction	-2859 Jun 19 j 19:45	3° II 30'35	0°-33'-56
minimum elong	-2867 Jun 01 j 07:08	15° 8 44'18	1°09'45	minimum elong	-2859 Jun 19 j 19:45	3° II 30'35	0°33'53
max. Earth dist.	-2867 May 31 j 21:55	15° 8 43'26	30.97222 AU	max. Earth dist.	-2859 Jun 19 j 02:15	3° II 28'58	31.05342 AU
retrograde	-2867 Sep 13 j 20:14	18° 8 14'28		retrograde	-2859 Oct 01 j 12:44	5° II 59'32	
opposition	-2867 Nov 30 j 04:00	16° 8 50'55	-1°-12'-24	opposition	-2859 Dec 17 j 14:28	4° II 36'40	0°-33'-45
min. Earth dist.	-2867 Nov 30 j 12:42	16° 8 50'18	28.97725 AU	min. Earth dist.	-2859 Dec 18 j 05:39	4° II 35'37	29.05736 AU
direct	-2866 Feb 17 j 09:16	15° 8 25'40		direct	-2858 Mar 07 j 09:27	3° II 11'22	
conjunction	-2866 Jun 03 j 20:46	17° 8 57'36	-1°-5'-37	conjunction	-2858 Jun 22 j 09:04	5° II 43'34	0°-29'-10
minimum elong	-2866 Jun 03 j 20:46	17° 8 57'36	1°05'34	minimum elong	-2858 Jun 22 j 09:04	5° II 43'34	0°29'06
max. Earth dist.	-2866 Jun 03 j 09:47	17° 8 56'35	30.98175 AU	max. Earth dist.	-2858 Jun 21 j 15:47	5° II 41'58	31.06066 AU
retrograde	-2866 Sep 16 j 08:26	20° 8 27'36		retrograde	-2858 Oct 03 j 22:54	8° II 12'20	
opposition	-2866 Dec 02 j 14:10	19° 8 04'09	-1°-7'-52	opposition	-2858 Dec 20 j 00:50	6° II 49'32	0°-28'-38
min. Earth dist.	-2866 Dec 02 j 22:52	19° 8 03'32	28.98746 AU	min. Earth dist.	-2858 Dec 20 j 16:56	6° II 48'24	29.06434 AU
direct	-2865 Feb 19 j 20:09	17° 8 38'53		direct	-2857 Mar 09 j 22:53	5° II 24'11	
conjunction	-2865 Jun 06 j 10:24	20° 8 10'52	-1°-1'-19	conjunction	-2857 Jun 24 j 21:58	7° II 56'22	0°-24'-22
minimum elong	-2865 Jun 06 j 10:24	20° 8 10'52	1°01'17	minimum elong	-2857 Jun 24 j 21:58	7° II 56'22	0°24'19
max. Earth dist.	-2865 Jun 05 j 23:49	20° 8 09'53	30.99255 AU	max. Earth dist.	-2857 Jun 24 j 02:50	7° II 54'36	31.06766 AU
retrograde	-2865 Sep 18 j 17:55	22° 8 40'44		retrograde	-2857 Oct 06 j 10:48	10° II 24'59	
opposition	-2865 Dec 05 j 00:28	21° 8 17'22	-1°-3'-14	opposition	-2857 Dec 22 j 11:08	9° II 02'12	0°-23'-29
min. Earth dist.	-2865 Dec 05 j 10:39	21° 8 16'39	28.99861 AU	min. Earth dist.	-2857 Dec 23 j 03:17	9° II 01'04	29.07140 AU
direct	-2864 Feb 22 j 06:54	19° 8 52'07		direct	-2856 Mar 11 j 10:45	7° II 36'49	
max. Earth dist.	-2864 Jun 07 j 11:53	22° 8 23'02	31.00412 AU				
conjunction	-2864 Jun 08 j 00:02	22° 8 24'09	0°-56'-57	conjunction	-2856 Jun 26 j 11:02	10° II 09'00	0°-19'-33
minimum elong	-2864 Jun 08 j 00:03	22° 8 24'09	0°56'53	minimum elong	-2856 Jun 26 j 11:02	10° II 09'00	0°19'28
retrograde	-2864 Sep 20 j 04:57	24° 8 53'52		max. Earth dist.	-2856 Jun 25 j 16:22	10° II 07'16	31.07480 AU
opposition	-2864 Dec 06 j 10:33	23° 8 30'38	0°-58'-31	retrograde	-2856 Oct 07 j 19:32	12° II 37'26	
min. Earth dist.	-2864 Dec 06 j 20:40	23° 8 29'55	29.01023 AU	opposition	-2856 Dec 23 j 21:29	11° II 14'43	0°-18'-19
direct	-2863 Feb 23 j 19:17	22° 8 05'24		min. Earth dist.	-2856 Dec 24 j 15:00	11° II 13'29	29.07881 AU
				direct	-2855 Mar 13 j 22:21	9° II 49'18	
conjunction	-2863 Jun 10 j 13:48	24° 8 37'30	0°-52'-29	conjunction	-2855 Jun 28 j 23:48	12° II 21'28	0°-14'-41
minimum elong	-2863 Jun 10 j 13:48	24° 8 37'30	0°52'26	minimum elong	-2855 Jun 28 j 23:48	12° II 21'28	0°14'38
max. Earth dist.	-2863 Jun 10 j 01:12	24° 8 36'20	31.01563 AU	behind sun begin	-2855 Jun 28 j 21:13	12° II 21'14	
retrograde	-2863 Sep 22 j 15:03	27° 8 07'05		behind sun end	-2855 Jun 29 j 02:24	12° II 21'42	
opposition	-2863 Dec 08 j 21:00	25° 8 43'56	0°-53'-42	max. Earth dist.	-2855 Jun 28 j 03:55	12° II 19'38	31.08269 AU
min. Earth dist.	-2863 Dec 09 j 08:59	25° 8 43'06	29.02156 AU	retrograde	-2855 Oct 10 j 05:41	14° II 49'46	
direct	-2862 Feb 26 j 06:15	24° 8 18'43		opposition	-2855 Dec 26 j 07:51	13° II 27'06	0°-13'-6
conjunction	-2862 Jun 13 j 03:17	26° 8 50'51	0°-47'-56	min. Earth dist.	-2855 Dec 27 j 00:43	13° II 25'55	29.08719 AU
minimum elong	-2862 Jun 13 j 03:17	26° 8 50'51	0°47'52	direct	-2854 Mar 16 j 10:40	12° II 01'40	
max. Earth dist.	-2862 Jun 12 j 13:30	26° 8 49'34	31.02666 AU				
retrograde	-2862 Sep 25 j 02:42	29° 8 20'18		conjunction	-2854 Jul 01 j 12:26	14° II 33'50	0°-9'-50
opposition	-2862 Dec 11 j 07:21	27° 8 57'15	0°-48'-48	minimum elong	-2854 Jul 01 j 12:26	14° II 33'50	0°09'45
min. Earth dist.	-2862 Dec 11 j 19:18	27° 8 56'24	29.03205 AU	behind sun begin	-2854 Jul 01 j 07:05	14° II 33'22	
direct	-2861 Feb 28 j 19:17	26° 8 32'01		behind sun end	-2854 Jul 01 j 17:47	14° II 34'19	
				max. Earth dist.	-2854 Jun 30 j 16:49	14° II 32'02	31.09155 AU
conjunction	-2861 Jun 15 j 16:51	29° 8 04'11	0°-43'-20	retrograde	-2854 Oct 12 j 14:57	17° II 02'01	
minimum elong	-2861 Jun 15 j 16:52	29° 8 04'11	0°43'17	opposition	-2854 Dec 28 j 18:21	15° II 39'25	0°-7'-53
max. Earth dist.	-2861 Jun 15 j 01:41	29° 8 02'47	31.03662 AU	min. Earth dist.	-2854 Dec 29 j 12:27	15° II 38'09	29.09668 AU
	-2861 Jul 11 j 07:28	0° II		direct	-2853 Mar 18 j 20:50	14° II 14'00	
retrograde	-2861 Sep 27 j 13:54	1° II 33'29		max. Earth dist.	-2853 Jul 03 j 04:52	16° II 44'18	31.10166 AU
opposition	-2861 Dec 13 j 17:42	0° II 10'30	0°-43'-51				
min. Earth dist.	-2861 Dec 14 j 07:25	0° II 09'32	29.04154 AU	conjunction	-2853 Jul 04 j 01:03	16° II 46'11	0°-4'-58
	-2861 Dec 19 j 23:12	30° 8		minimum elong	-2853 Jul 04 j 01:02	16° II 46'11	0°04'55
				behind sun begin	-2853 Jul 03 j 18:39	16° II 45'36	

Attention, astronomical year style is used: The year -2853 in astronomical counting style is the year 2854 BCE in historical counting style.

behind sun end	-2853 Jul 04 j 07:26	16°II46'45		conjunction	-2846 Jul 19 j 15:38	2°☾12'39	0°29'07
retrograde	-2853 Oct 15 j 01:38	19°II14'14		minimum elong	-2846 Jul 19 j 15:38	2°☾12'39	0°29'12
opposition	-2853 Dec 31 j 04:34	17°II51'44	0°-2'-39	max. Earth dist.	-2846 Jul 18 j 14:56	2°☾10'21	31.16529 AU
min. Earth dist.	-2853 Dec 31 j 22:09	17°II50'30	29.10714 AU	retrograde	-2846 Oct 30 j 04:37	4°☾39'55	
direct	-2852 Mar 20 j 08:49	16°II26'20		opposition	-2845 Jan 15 j 07:07	3°☾17'48	0°33'35
				min. Earth dist.	-2845 Jan 16 j 04:48	3°☾16'18	29.16838 AU
conjunction	-2852 Jul 05 j 13:40	18°II58'32	0°00'00	direct	-2845 Apr 06 j 01:22	1°☾52'26	
minimum elong	-2852 Jul 05 j 13:40	18°II58'32	0°00'05	max. Earth dist.	-2845 Jul 21 j 03:07	4°☾22'14	31.17060 AU
behind sun begin	-2852 Jul 05 j 07:26	18°II57'59					
behind sun end	-2852 Jul 05 j 19:54	18°II59'05		conjunction	-2845 Jul 22 j 03:39	4°☾24'31	0°33'50
max. Earth dist.	-2852 Jul 04 j 16:48	18°II56'36	31.11243 AU	minimum elong	-2845 Jul 22 j 03:39	4°☾24'31	0°33'55
asc. node	-2852 Jul 06 j 02:18	18°II59'42		retrograde	-2845 Nov 01 j 13:37	6°☾51'39	
retrograde	-2852 Oct 16 j 12:24	21°II26'30		opposition	-2844 Jan 17 j 17:47	5°☾29'32	0°38'36
opposition	-2851 Jan 01 j 15:06	20°II04'05	0°02'34	min. Earth dist.	-2844 Jan 18 j 16:52	5°☾27'56	29.17358 AU
min. Earth dist.	-2851 Jan 02 j 09:55	20°II02'46	29.11817 AU	direct	-2844 Apr 07 j 12:08	4°☾04'08	
direct	-2851 Mar 22 j 20:18	18°II38'44					
max. Earth dist.	-2851 Jul 07 j 05:25	21°II09'02	31.12347 AU	conjunction	-2844 Jul 23 j 15:26	6°☾36'08	0°38'30
				minimum elong	-2844 Jul 23 j 15:26	6°☾36'08	0°38'36
conjunction	-2851 Jul 08 j 02:11	21°II10'58	0°04'58	max. Earth dist.	-2844 Jul 22 j 14:27	6°☾33'49	31.17577 AU
minimum elong	-2851 Jul 08 j 02:10	21°II10'58	0°05'03	retrograde	-2844 Nov 02 j 23:14	9°☾03'09	
behind sun begin	-2851 Jul 07 j 19:48	21°II10'24		opposition	-2843 Jan 19 j 04:30	7°☾41'02	0°43'33
behind sun end	-2851 Jul 08 j 08:32	21°II11'32		min. Earth dist.	-2843 Jan 20 j 02:52	7°☾39'29	29.17878 AU
retrograde	-2851 Oct 18 j 23:30	23°II38'50		direct	-2843 Apr 10 j 00:48	6°☾15'36	
opposition	-2850 Jan 04 j 01:39	22°II16'30	0°07'48	max. Earth dist.	-2843 Jul 25 j 01:42	8°☾45'12	31.18110 AU
min. Earth dist.	-2850 Jan 04 j 20:40	22°II15'10	29.12899 AU				
direct	-2850 Mar 25 j 10:11	20°II51'11		conjunction	-2843 Jul 26 j 02:56	8°☾47'33	0°43'07
				minimum elong	-2843 Jul 26 j 02:55	8°☾47'33	0°43'12
conjunction	-2850 Jul 10 j 14:36	23°II23'26	0°09'50	retrograde	-2843 Nov 05 j 08:51	11°☾14'27	
minimum elong	-2850 Jul 10 j 14:36	23°II23'26	0°09'56	opposition	-2842 Jan 21 j 15:21	9°☾52'21	0°48'27
behind sun begin	-2850 Jul 10 j 09:18	23°II22'57		min. Earth dist.	-2842 Jan 22 j 14:23	9°☾50'45	29.18464 AU
behind sun end	-2850 Jul 10 j 19:53	23°II23'54		direct	-2842 Apr 12 j 11:55	8°☾26'53	
max. Earth dist.	-2850 Jul 09 j 16:23	23°II21'22	31.13400 AU				
retrograde	-2850 Oct 21 j 10:54	25°II51'12		conjunction	-2842 Jul 28 j 14:24	10°☾58'47	0°47'40
opposition	-2849 Jan 06 j 12:14	24°II28'57	0°13'01	minimum elong	-2842 Jul 28 j 14:23	10°☾58'47	0°47'45
min. Earth dist.	-2849 Jan 07 j 07:56	24°II27'34	29.13927 AU	max. Earth dist.	-2842 Jul 27 j 13:51	10°☾56'30	31.18740 AU
direct	-2849 Mar 27 j 21:16	23°II03'38		retrograde	-2842 Nov 07 j 18:44	13°☾25'36	
max. Earth dist.	-2849 Jul 12 j 05:11	25°II33'52	31.14367 AU	opposition	-2841 Jan 24 j 02:05	12°☾03'31	0°53'16
				min. Earth dist.	-2841 Jan 25 j 00:43	12°☾01'57	29.19145 AU
conjunction	-2849 Jul 13 j 03:04	25°II35'54	0°14'41	direct	-2841 Apr 15 j 00:50	10°☾38'04	
minimum elong	-2849 Jul 13 j 03:04	25°II35'53	0°14'46	max. Earth dist.	-2841 Jul 30 j 00:26	13°☾07'35	31.19475 AU
behind sun begin	-2849 Jul 13 j 00:34	25°II35'40					
behind sun end	-2849 Jul 13 j 05:33	25°II36'07		conjunction	-2841 Jul 31 j 01:42	13°☾09'56	0°52'08
retrograde	-2849 Oct 23 j 21:35	28°II03'33		minimum elong	-2841 Jul 31 j 01:42	13°☾09'56	0°52'12
opposition	-2848 Jan 08 j 22:58	26°II41'21	0°18'13	retrograde	-2841 Nov 10 j 05:53	15°☾36'41	
min. Earth dist.	-2848 Jan 09 j 19:38	26°II39'55	29.14828 AU	opposition	-2840 Jan 26 j 12:54	14°☾14'39	0°58'00
direct	-2848 Mar 29 j 11:19	25°II16'04		min. Earth dist.	-2840 Jan 27 j 11:27	14°☾13'06	29.19944 AU
				direct	-2840 Apr 16 j 11:23	12°☾49'14	
conjunction	-2848 Jul 14 j 15:22	27°II48'18	0°19'32				
minimum elong	-2848 Jul 14 j 15:22	27°II48'17	0°19'38	conjunction	-2840 Aug 01 j 13:04	15°☾21'05	0°56'32
max. Earth dist.	-2848 Jul 13 j 15:36	27°II46'05	31.15205 AU	minimum elong	-2840 Aug 01 j 13:04	15°☾21'05	0°56'37
	-2848 Sep 24 j 22:42	0°☾		max. Earth dist.	-2840 Jul 31 j 12:57	15°☾18'51	31.20313 AU
retrograde	-2848 Oct 25 j 09:46	0°☾15'49		retrograde	-2840 Nov 11 j 16:12	17°☾47'48	
	-2848 Nov 25 j 04:46	30°RII		opposition	-2839 Jan 27 j 23:50	16°☾25'50	1°02'40
opposition	-2847 Jan 10 j 09:35	28°II53'40	0°23'23	min. Earth dist.	-2839 Jan 28 j 22:43	16°☾24'15	29.20811 AU
min. Earth dist.	-2847 Jan 11 j 06:19	28°II52'14	29.15609 AU	direct	-2839 Apr 19 j 00:59	15°☾00'29	
direct	-2847 Apr 01 j 00:12	27°II28'22		max. Earth dist.	-2839 Aug 02 j 23:03	17°☾29'59	31.21207 AU
max. Earth dist.	-2847 Jul 16 j 04:21	29°II58'24	31.15917 AU				
	-2847 Jul 16 j 21:37	0°☾		conjunction	-2839 Aug 04 j 00:14	17°☾32'19	1°00'51
conjunction	-2847 Jul 17 j 03:45	0°☾00'34	0°24'21	minimum elong	-2839 Aug 04 j 00:14	17°☾32'19	1°00'55
minimum elong	-2847 Jul 17 j 03:44	0°☾00'34	0°24'25	retrograde	-2839 Nov 14 j 04:38	19°☾59'00	
retrograde	-2847 Oct 27 j 18:30	2°☾27'58		opposition	-2838 Jan 30 j 10:48	18°☾37'07	1°07'14
opposition	-2846 Jan 12 j 20:29	1°☾05'50	0°28'30	min. Earth dist.	-2838 Jan 31 j 09:04	18°☾35'34	29.21723 AU
min. Earth dist.	-2846 Jan 13 j 18:38	1°☾04'18	29.16267 AU	direct	-2838 Apr 21 j 13:15	17°☾11'49	
	-2846 Feb 27 j 00:05	30°RII		max. Earth dist.	-2838 Aug 05 j 11:09	19°☾41'24	31.22098 AU
direct	-2846 Apr 03 j 12:46	29°II40'31		conjunction	-2838 Aug 06 j 11:22	19°☾43'39	1°05'04
	-2846 May 08 j 10:38	0°☾		minimum elong	-2838 Aug 06 j 11:22	19°☾43'39	1°05'10

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Attention, astronomical year style is used: The year -2838 in astronomical counting style is the year 2839 BCE in historical counting style.

retrograde	-2838 Nov 16 j 13:48	22° $\overline{5}$ 10'19		retrograde	-2830 Dec 03 j 23:20	9° $\overline{0}$ 39'54	
opposition	-2837 Feb 01 j 21:58	20° $\overline{5}$ 48'30	1°11'42	opposition	-2829 Feb 19 j 16:20	8° $\overline{0}$ 18'04	1°43'07
min. Earth dist.	-2837 Feb 02 j 21:21	20° $\overline{5}$ 46'53	29.22594 AU	min. Earth dist.	-2829 Feb 20 j 14:45	8° $\overline{0}$ 16'32	29.26401 AU
direct	-2837 Apr 24 j 01:26	19° $\overline{5}$ 23'16		direct	-2829 May 12 j 00:57	6° $\overline{0}$ 52'57	
conjunction	-2837 Aug 08 j 22:28	21° $\overline{5}$ 55'05	1°09'12	conjunction	-2829 Aug 26 j 11:56	9° $\overline{0}$ 24'10	1°38'08
minimum elong	-2837 Aug 08 j 22:27	21° $\overline{5}$ 55'05	1°09'16	minimum elong	-2829 Aug 26 j 11:56	9° $\overline{0}$ 24'10	1°38'11
max. Earth dist.	-2837 Aug 07 j 21:16	21° $\overline{5}$ 52'44	31.22932 AU	max. Earth dist.	-2829 Aug 25 j 12:24	9° $\overline{0}$ 21'58	31.26514 AU
retrograde	-2837 Nov 19 j 00:20	24° $\overline{5}$ 21'43		retrograde	-2829 Dec 06 j 08:21	11° $\overline{0}$ 50'31	
opposition	-2836 Feb 04 j 08:55	22° $\overline{5}$ 59'57	1°16'03	opposition	-2828 Feb 22 j 03:46	10° $\overline{0}$ 28'42	1°46'26
min. Earth dist.	-2836 Feb 05 j 07:37	22° $\overline{5}$ 58'23	29.23383 AU	min. Earth dist.	-2828 Feb 23 j 02:40	10° $\overline{0}$ 27'08	29.26892 AU
direct	-2836 Apr 25 j 13:50	21° $\overline{5}$ 34'46		direct	-2828 May 13 j 12:57	9° $\overline{0}$ 03'37	
max. Earth dist.	-2836 Aug 09 j 08:46	24° $\overline{5}$ 04'15	31.23652 AU				
conjunction	-2836 Aug 10 j 09:40	24° $\overline{5}$ 06'34	1°13'14	conjunction	-2828 Aug 27 j 22:04	11° $\overline{0}$ 34'46	1°41'09
minimum elong	-2836 Aug 10 j 09:39	24° $\overline{5}$ 06'34	1°13'19	minimum elong	-2828 Aug 27 j 22:04	11° $\overline{0}$ 34'46	1°41'13
retrograde	-2836 Nov 20 j 10:07	26° $\overline{5}$ 33'10		max. Earth dist.	-2828 Aug 26 j 22:23	11° $\overline{0}$ 32'33	31.27060 AU
opposition	-2835 Feb 05 j 20:18	25° $\overline{5}$ 11'26	1°20'18	retrograde	-2828 Dec 07 j 19:19	14° $\overline{0}$ 01'07	
min. Earth dist.	-2835 Feb 06 j 20:12	25° $\overline{5}$ 09'48	29.24057 AU	opposition	-2827 Feb 23 j 15:16	12° $\overline{0}$ 39'19	1°49'35
direct	-2835 Apr 28 j 00:36	23° $\overline{5}$ 46'18		min. Earth dist.	-2827 Feb 24 j 12:40	12° $\overline{0}$ 37'51	29.27480 AU
conjunction	-2835 Aug 12 j 20:33	26° $\overline{5}$ 18'02	1°17'10	direct	-2827 May 16 j 01:55	11° $\overline{0}$ 14'18	
minimum elong	-2835 Aug 12 j 20:33	26° $\overline{5}$ 18'02	1°17'13	max. Earth dist.	-2827 Aug 29 j 09:28	13° $\overline{0}$ 43'16	31.27672 AU
max. Earth dist.	-2835 Aug 11 j 19:22	26° $\overline{5}$ 15'41	31.24261 AU	conjunction	-2827 Aug 30 j 08:08	13° $\overline{0}$ 45'24	1°44'02
retrograde	-2835 Nov 22 j 19:37	28° $\overline{5}$ 44'36		minimum elong	-2827 Aug 30 j 08:08	13° $\overline{0}$ 45'24	1°44'05
opposition	-2834 Feb 08 j 07:35	27° $\overline{5}$ 22'54	1°24'26		-2827 Oct 04 j 01:43	15° $\overline{0}$	
min. Earth dist.	-2834 Feb 09 j 06:45	27° $\overline{5}$ 21'18	29.24599 AU	retrograde	-2827 Dec 10 j 05:36	16° $\overline{0}$ 11'46	
direct	-2834 Apr 30 j 13:18	25° $\overline{5}$ 57'46			-2826 Feb 20 j 00:07	15° $\overline{0}$ 11'46	
max. Earth dist.	-2834 Aug 14 j 05:50	28° $\overline{5}$ 27'03	31.24736 AU	opposition	-2826 Feb 26 j 03:01	14° $\overline{0}$ 50'00	1°52'35
conjunction	-2834 Aug 15 j 07:29	28° $\overline{5}$ 29'27	1°20'58	min. Earth dist.	-2826 Feb 27 j 00:58	14° $\overline{0}$ 48'30	29.28121 AU
minimum elong	-2834 Aug 15 j 07:28	28° $\overline{5}$ 29'27	1°21'03	direct	-2826 May 18 j 13:15	13° $\overline{0}$ 25'04	
retrograde	-2834 Sep 27 j 16:00	0° $\overline{0}$			-2826 Aug 07 j 04:42	15° $\overline{0}$	
opposition	-2834 Nov 25 j 05:07	0° $\overline{0}$ 55'58		conjunction	-2826 Sep 01 j 18:12	15° $\overline{0}$ 56'06	1°46'46
min. Earth dist.	-2833 Jan 25 j 21:08	30° $\overline{0}$ 18'58		minimum elong	-2826 Sep 01 j 18:11	15° $\overline{0}$ 56'06	1°46'50
direct	-2833 Feb 10 j 18:49	29° $\overline{5}$ 34'15	1°28'26	max. Earth dist.	-2826 Aug 31 j 19:55	15° $\overline{0}$ 54'00	31.28317 AU
max. Earth dist.	-2833 Feb 11 j 18:49	29° $\overline{5}$ 32'37	29.25037 AU	retrograde	-2826 Dec 12 j 15:04	18° $\overline{0}$ 22'30	
conjunction	-2833 May 02 j 23:57	28° $\overline{5}$ 09'08		opposition	-2825 Feb 28 j 14:31	17° $\overline{0}$ 00'46	1°55'25
minimum elong	-2833 Jul 30 j 09:12	0° $\overline{0}$		min. Earth dist.	-2825 Mar 01 j 11:22	16° $\overline{0}$ 59'21	29.28750 AU
opposition	-2833 Aug 17 j 18:19	0° $\overline{0}$ 40'44	1°24'39	direct	-2825 May 21 j 01:42	15° $\overline{0}$ 35'54	
minimum elong	-2833 Aug 17 j 18:18	0° $\overline{0}$ 40'44	1°24'43	max. Earth dist.	-2825 Sep 03 j 05:52	18° $\overline{0}$ 04'47	31.28911 AU
max. Earth dist.	-2833 Aug 16 j 17:14	0° $\overline{0}$ 38'23	31.25120 AU	conjunction	-2825 Sep 04 j 04:17	18° $\overline{0}$ 06'53	1°49'21
retrograde	-2833 Nov 27 j 14:31	3° $\overline{0}$ 07'12		minimum elong	-2825 Sep 04 j 04:16	18° $\overline{0}$ 06'53	1°49'24
opposition	-2832 Feb 13 j 06:09	1° $\overline{0}$ 45'28	1°32'19	retrograde	-2825 Dec 15 j 01:06	20° $\overline{0}$ 33'21	
min. Earth dist.	-2832 Feb 14 j 05:55	1° $\overline{0}$ 43'51	29.25373 AU	opposition	-2824 Mar 02 j 02:25	19° $\overline{0}$ 11'38	1°58'05
direct	-2832 May 04 j 12:16	0° $\overline{0}$ 20'21		min. Earth dist.	-2824 Mar 02 j 23:42	19° $\overline{0}$ 10'11	29.29317 AU
max. Earth dist.	-2832 Aug 18 j 03:05	2° $\overline{0}$ 49'26	31.25426 AU	direct	-2824 May 22 j 11:52	17° $\overline{0}$ 46'51	
conjunction	-2832 Aug 19 j 04:52	2° $\overline{0}$ 51'51	1°28'13	conjunction	-2824 Sep 05 j 14:20	20° $\overline{0}$ 17'46	1°51'46
minimum elong	-2832 Aug 19 j 04:52	2° $\overline{0}$ 51'51	1°28'19	minimum elong	-2824 Sep 05 j 14:20	20° $\overline{0}$ 17'46	1°51'50
retrograde	-2832 Nov 29 j 01:28	5° $\overline{0}$ 18'17		max. Earth dist.	-2824 Sep 04 j 16:53	20° $\overline{0}$ 15'45	31.29418 AU
opposition	-2831 Feb 14 j 17:30	3° $\overline{0}$ 56'31	1°36'04	retrograde	-2824 Dec 16 j 10:39	22° $\overline{0}$ 44'16	
min. Earth dist.	-2831 Feb 15 j 17:05	3° $\overline{0}$ 54'54	29.25680 AU	opposition	-2823 Mar 04 j 14:24	21° $\overline{0}$ 22'35	2°00'36
direct	-2831 May 06 j 22:55	2° $\overline{0}$ 31'23		min. Earth dist.	-2823 Mar 05 j 11:15	21° $\overline{0}$ 21'10	29.29759 AU
conjunction	-2831 Aug 21 j 15:26	5° $\overline{0}$ 02'47	1°31'40	direct	-2823 May 24 j 23:47	19° $\overline{0}$ 57'51	
minimum elong	-2831 Aug 21 j 15:25	5° $\overline{0}$ 02'47	1°31'43	max. Earth dist.	-2823 Sep 07 j 02:11	22° $\overline{0}$ 26'37	31.29792 AU
max. Earth dist.	-2831 Aug 20 j 15:03	5° $\overline{0}$ 00'30	31.25727 AU	conjunction	-2823 Sep 08 j 00:19	22° $\overline{0}$ 28'42	1°54'01
retrograde	-2831 Dec 01 j 11:27	7° $\overline{0}$ 29'10		minimum elong	-2823 Sep 08 j 00:19	22° $\overline{0}$ 28'42	1°54'04
opposition	-2830 Feb 17 j 04:58	6° $\overline{0}$ 07'22	1°39'40	retrograde	-2823 Dec 18 j 22:15	24° $\overline{0}$ 55'15	
min. Earth dist.	-2830 Feb 18 j 04:34	6° $\overline{0}$ 05'45	29.26000 AU	opposition	-2822 Mar 07 j 02:24	23° $\overline{0}$ 33'33	2°02'55
direct	-2830 May 09 j 12:44	4° $\overline{0}$ 42'14		min. Earth dist.	-2822 Mar 07 j 22:59	23° $\overline{0}$ 32'09	29.30077 AU
max. Earth dist.	-2830 Aug 23 j 00:35	7° $\overline{0}$ 11'12	31.26078 AU	direct	-2822 May 27 j 10:05	22° $\overline{0}$ 08'52	
conjunction	-2830 Aug 24 j 01:34	7° $\overline{0}$ 13'32	1°34'58	conjunction	-2822 Sep 10 j 10:20	24° $\overline{0}$ 39'38	1°56'07
minimum elong	-2830 Aug 24 j 01:34	7° $\overline{0}$ 13'32	1°35'02	minimum elong	-2822 Sep 10 j 10:19	24° $\overline{0}$ 39'38	1°56'10
				max. Earth dist.	-2822 Sep 09 j 13:27	24° $\overline{0}$ 37'41	31.30025 AU

Attention, astronomical year style is used: The year -2822 in astronomical counting style is the year 2823 BCE in historical counting style.

retrograde	-2822 Dec 21 j 08:26	27°06'14		retrograde	-2813 Jan 07 j 19:49	14°03'158	
opposition	-2821 Mar 09 j 14:30	25°04'31	2°05'04	opposition	-2813 Mar 27 j 15:51	13°09'58	2°15'38
min. Earth dist.	-2821 Mar 10 j 11:18	25°04'06	29.30230 AU	min. Earth dist.	-2813 Mar 28 j 07:01	13°08'57	29.30203 AU
direct	-2821 May 29 j 23:09	24°01'53		direct	-2813 Jun 16 j 21:24	11°04'541	
conjunction	-2821 Sep 12 j 20:10	26°05'33	1°58'03	conjunction	-2813 Sep 29 j 23:58	14°01'537	2°07'13
minimum elong	-2821 Sep 12 j 20:10	26°05'33	1°58'05	minimum elong	-2813 Sep 29 j 23:58	14°01'537	2°07'14
max. Earth dist.	-2821 Sep 11 j 22:25	26°04'31	31.30108 AU	max. Earth dist.	-2813 Sep 29 j 09:09	14°01'414	31.30096 AU
retrograde	-2821 Dec 23 j 20:36	29°01'11		retrograde	-2812 Jan 10 j 05:52	16°04'249	
opposition	-2820 Mar 11 j 02:26	27°05'26	2°07'03	opposition	-2812 Mar 29 j 04:18	15°02'049	2°16'05
min. Earth dist.	-2820 Mar 11 j 22:15	27°05'405	29.30251 AU	min. Earth dist.	-2812 Mar 29 j 19:17	15°01'948	29.30292 AU
direct	-2820 May 31 j 10:52	26°03'48		direct	-2812 Jun 18 j 09:09	13°05'637	
max. Earth dist.	-2820 Sep 13 j 09:35	28°05'28	31.30066 AU				
conjunction	-2820 Sep 14 j 06:04	29°01'23	1°59'48	conjunction	-2812 Oct 01 j 09:15	16°02'629	2°07'33
minimum elong	-2820 Sep 14 j 06:04	29°01'23	1°59'52	minimum elong	-2812 Oct 01 j 09:15	16°02'629	2°07'34
	-2820 Oct 10 j 22:36	0°00		max. Earth dist.	-2812 Sep 30 j 18:02	16°02'503	31.30158 AU
retrograde	-2820 Dec 25 j 06:12	1°02'2803		retrograde	-2811 Jan 11 j 18:23	18°05'347	
opposition	-2819 Mar 13 j 14:42	0°06'15	2°08'50	opposition	-2811 Mar 31 j 16:49	17°03'146	2°16'21
min. Earth dist.	-2819 Mar 14 j 11:04	0°04'52	29.30168 AU	min. Earth dist.	-2811 Apr 01 j 06:27	17°03'051	29.30312 AU
	-2819 Mar 17 j 10:51	30°04		direct	-2811 Jun 20 j 19:24	16°07'38	
direct	-2819 Jun 02 j 23:02	28°04'139		conjunction	-2811 Oct 03 j 18:34	18°03'725	2°07'42
	-2819 Aug 14 j 06:42	0°00		minimum elong	-2811 Oct 03 j 18:34	18°03'725	2°07'42
conjunction	-2819 Sep 16 j 15:33	1°01'1207	2°01'24	max. Earth dist.	-2811 Oct 03 j 04:44	18°03'607	31.30114 AU
minimum elong	-2819 Sep 16 j 15:32	1°01'1207	2°01'26	retrograde	-2810 Jan 14 j 04:51	21°04'450	
max. Earth dist.	-2819 Sep 15 j 19:05	1°01'1011	31.29959 AU	opposition	-2810 Apr 03 j 05:31	19°04'246	2°16'25
retrograde	-2819 Dec 27 j 17:21	3°03'3848		min. Earth dist.	-2810 Apr 03 j 19:38	19°04'149	29.30204 AU
opposition	-2818 Mar 16 j 02:45	2°01'1656	2°10'27	direct	-2810 Jun 23 j 07:05	18°01'842	
min. Earth dist.	-2818 Mar 16 j 21:33	2°01'1540	29.30046 AU	conjunction	-2810 Oct 06 j 03:55	20°04'823	2°07'40
direct	-2818 Jun 05 j 12:39	0°05'221		minimum elong	-2810 Oct 06 j 03:55	20°04'823	2°07'41
max. Earth dist.	-2818 Sep 18 j 05:42	3°02'2053	31.29829 AU	max. Earth dist.	-2810 Oct 05 j 14:04	20°04'705	31.29942 AU
conjunction	-2818 Sep 19 j 01:08	3°02'2243	2°02'49	retrograde	-2809 Jan 16 j 17:05	23°01'553	
minimum elong	-2818 Sep 19 j 01:08	3°02'2243	2°02'51	opposition	-2809 Apr 05 j 17:58	21°05'347	2°16'17
retrograde	-2818 Dec 30 j 03:51	5°04'4927		min. Earth dist.	-2809 Apr 06 j 06:37	21°05'255	29.29952 AU
opposition	-2817 Mar 18 j 14:50	4°02'2732	2°11'52	direct	-2809 Jun 25 j 20:26	20°02'944	
min. Earth dist.	-2817 Mar 19 j 09:56	4°02'2614	29.29944 AU	conjunction	-2809 Oct 08 j 13:20	22°05'5920	2°07'27
direct	-2817 Jun 08 j 00:35	3°02'0258		minimum elong	-2809 Oct 08 j 13:20	22°05'5920	2°07'27
conjunction	-2817 Sep 21 j 10:37	5°03'3314	2°04'03	max. Earth dist.	-2809 Oct 08 j 00:06	22°05'5805	31.29609 AU
minimum elong	-2817 Sep 21 j 10:37	5°03'3314	2°04'04	retrograde	-2808 Jan 19 j 04:34	25°02'655	
max. Earth dist.	-2817 Sep 20 j 16:05	5°03'3129	31.29758 AU	opposition	-2808 Apr 07 j 06:47	24°04'044	2°15'58
retrograde	-2816 Jan 01 j 12:57	8°00'0001		min. Earth dist.	-2808 Apr 07 j 19:54	24°03'051	29.29550 AU
opposition	-2816 Mar 20 j 02:59	6°03'3804	2°13'06	direct	-2808 Jun 27 j 08:23	22°04'043	
min. Earth dist.	-2816 Mar 20 j 20:18	6°03'3653	29.29903 AU	conjunction	-2808 Oct 09 j 22:32	25°01'1012	2°07'03
direct	-2816 Jun 09 j 13:27	5°01'1333		minimum elong	-2808 Oct 09 j 22:33	25°01'1012	2°07'05
conjunction	-2816 Sep 22 j 19:56	7°04'4343	2°05'07	max. Earth dist.	-2808 Oct 09 j 10:10	25°00'902	31.29147 AU
minimum elong	-2816 Sep 22 j 19:55	7°04'4343	2°05'09	retrograde	-2807 Jan 20 j 14:11	27°03'752	
max. Earth dist.	-2816 Sep 22 j 01:47	7°04'4201	31.29757 AU	opposition	-2807 Apr 09 j 19:31	26°01'536	2°15'27
retrograde	-2815 Jan 02 j 22:45	10°01'1035		min. Earth dist.	-2807 Apr 10 j 07:04	26°01'449	29.29018 AU
opposition	-2815 Mar 22 j 15:18	8°04'4837	2°14'08	direct	-2807 Jun 29 j 21:44	24°05'135	
min. Earth dist.	-2815 Mar 23 j 08:19	8°04'4728	29.29955 AU	conjunction	-2807 Oct 12 j 07:43	27°02'056	2°06'29
direct	-2815 Jun 11 j 23:49	7°04'2410		minimum elong	-2807 Oct 12 j 07:43	27°02'056	2°06'29
conjunction	-2815 Sep 25 j 05:21	9°05'5415	2°06'00	max. Earth dist.	-2807 Oct 11 j 19:26	27°01'946	31.28574 AU
minimum elong	-2815 Sep 25 j 05:21	9°05'5415	2°06'01	retrograde	-2806 Jan 23 j 00:36	29°04'840	
max. Earth dist.	-2815 Sep 24 j 12:55	9°05'5242	31.29847 AU	opposition	-2806 Apr 12 j 08:11	28°02'618	2°14'45
retrograde	-2814 Jan 05 j 08:06	12°02'1113		min. Earth dist.	-2806 Apr 12 j 19:37	28°02'532	29.28424 AU
opposition	-2814 Mar 25 j 03:33	10°05'5914	2°14'59	direct	-2806 Jul 02 j 09:02	27°02'018	
min. Earth dist.	-2814 Mar 25 j 19:31	10°05'5809	29.30065 AU	conjunction	-2806 Oct 14 j 16:50	29°03'131	2°05'44
direct	-2814 Jun 14 j 11:18	9°05'3452		minimum elong	-2806 Oct 14 j 16:51	29°03'131	2°05'45
conjunction	-2814 Sep 27 j 14:35	12°04'0453	2°06'42	max. Earth dist.	-2806 Oct 14 j 06:21	29°03'031	31.27966 AU
minimum elong	-2814 Sep 27 j 14:35	12°04'0453	2°06'44	retrograde	-2806 Oct 27 j 08:06	0°00	
max. Earth dist.	-2814 Sep 26 j 22:00	12°03'0319	31.29977 AU	opposition	-2805 Jan 25 j 09:49	1°05'5920	
					-2805 Apr 14 j 20:52	0°03'3653	2°13'51

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Attention, astronomical year style is used: The year -2805 in astronomical counting style is the year 2806 BCE in historical counting style.

min. Earth dist.	-2805 Apr 15 j 07:06	0° $\underline{\text{A}}$ 36'11	29.27806 AU	direct	-2797 Jul 22 j 15:27	16° $\underline{\text{A}}$ 40'07	
	-2805 May 08 j 10:05	30° R $\underline{\text{M}}$					
direct	-2805 Jul 04 j 21:48	29° M 12'53		conjunction	-2797 Nov 03 j 02:13	19° $\underline{\text{A}}$ 08'39	1°51'02
	-2805 Aug 28 j 10:33	0° $\underline{\text{A}}$		minimum elong	-2797 Nov 03 j 02:14	19° $\underline{\text{A}}$ 08'39	1°50'59
				max. Earth dist.	-2797 Nov 03 j 00:18	19° $\underline{\text{A}}$ 08'28	31.24285 AU
conjunction	-2805 Oct 17 j 01:44	1° $\underline{\text{A}}$ 41'58	2°04'48	retrograde	-2796 Feb 14 j 16:24	21° $\underline{\text{A}}$ 37'49	
minimum elong	-2805 Oct 17 j 01:44	1° $\underline{\text{A}}$ 41'58	2°04'47	opposition	-2796 May 04 j 16:46	20° $\underline{\text{A}}$ 14'59	1°57'19
max. Earth dist.	-2805 Oct 16 j 15:19	1° $\underline{\text{A}}$ 40'59	31.27372 AU	min. Earth dist.	-2796 May 04 j 18:32	20° $\underline{\text{A}}$ 14'51	29.24068 AU
retrograde	-2804 Jan 27 j 21:06	4° $\underline{\text{A}}$ 09'54		direct	-2796 Jul 24 j 04:35	18° $\underline{\text{A}}$ 51'36	
opposition	-2804 Apr 16 j 09:34	2° $\underline{\text{A}}$ 47'21	2°12'46				
min. Earth dist.	-2804 Apr 16 j 18:35	2° $\underline{\text{A}}$ 46'45	29.27253 AU	conjunction	-2796 Nov 04 j 11:24	21° $\underline{\text{A}}$ 20'03	1°48'33
direct	-2804 Jul 06 j 08:10	1° $\underline{\text{A}}$ 23'24		minimum elong	-2796 Nov 04 j 11:24	21° $\underline{\text{A}}$ 20'03	1°48'32
				max. Earth dist.	-2796 Nov 04 j 09:08	21° $\underline{\text{A}}$ 19'50	31.23606 AU
conjunction	-2804 Oct 18 j 10:49	3° $\underline{\text{A}}$ 52'22	2°03'42	retrograde	-2795 Feb 16 j 04:06	23° $\underline{\text{A}}$ 49'22	
minimum elong	-2804 Oct 18 j 10:49	3° $\underline{\text{A}}$ 52'22	2°03'42	opposition	-2795 May 07 j 05:53	22° $\underline{\text{A}}$ 26'26	1°54'35
max. Earth dist.	-2804 Oct 18 j 02:35	3° $\underline{\text{A}}$ 51'35	31.26861 AU	min. Earth dist.	-2795 May 07 j 06:52	22° $\underline{\text{A}}$ 26'22	29.23328 AU
retrograde	-2803 Jan 29 j 06:49	6° $\underline{\text{A}}$ 20'26		direct	-2795 Jul 26 j 15:08	21° $\underline{\text{A}}$ 03'05	
opposition	-2803 Apr 18 j 22:23	4° $\underline{\text{A}}$ 57'49	2°11'29				
min. Earth dist.	-2803 Apr 19 j 06:37	4° $\underline{\text{A}}$ 57'16	29.26787 AU	conjunction	-2795 Nov 06 j 20:40	23° $\underline{\text{A}}$ 31'25	1°45'55
direct	-2803 Jul 08 j 19:36	3° $\underline{\text{A}}$ 33'55		minimum elong	-2795 Nov 06 j 20:40	23° $\underline{\text{A}}$ 31'25	1°45'53
				max. Earth dist.	-2795 Nov 06 j 20:09	23° $\underline{\text{A}}$ 31'22	31.22809 AU
conjunction	-2803 Oct 20 j 19:38	6° $\underline{\text{A}}$ 02'48	2°02'24	retrograde	-2794 Feb 18 j 13:23	26° $\underline{\text{A}}$ 00'52	
minimum elong	-2803 Oct 20 j 19:38	6° $\underline{\text{A}}$ 02'48	2°02'23	opposition	-2794 May 09 j 19:00	24° $\underline{\text{A}}$ 37'50	1°51'42
max. Earth dist.	-2803 Oct 20 j 11:36	6° $\underline{\text{A}}$ 02'02	31.26458 AU	min. Earth dist.	-2794 May 09 j 19:36	24° $\underline{\text{A}}$ 37'48	29.22475 AU
retrograde	-2802 Jan 31 j 19:13	8° $\underline{\text{A}}$ 31'00		direct	-2794 Jul 29 j 03:02	23° $\underline{\text{A}}$ 14'29	
opposition	-2802 Apr 21 j 11:04	7° $\underline{\text{A}}$ 08'21	2°10'01				
min. Earth dist.	-2802 Apr 21 j 17:22	7° $\underline{\text{A}}$ 07'56	29.26424 AU	conjunction	-2794 Nov 09 j 05:45	25° $\underline{\text{A}}$ 42'43	1°43'08
direct	-2802 Jul 11 j 05:14	5° $\underline{\text{A}}$ 44'31		minimum elong	-2794 Nov 09 j 05:46	25° $\underline{\text{A}}$ 42'43	1°43'06
				max. Earth dist.	-2794 Nov 09 j 05:13	25° $\underline{\text{A}}$ 42'40	31.21940 AU
conjunction	-2802 Oct 23 j 04:42	8° $\underline{\text{A}}$ 13'20	2°00'57	retrograde	-2793 Feb 21 j 01:35	28° $\underline{\text{A}}$ 12'16	
minimum elong	-2802 Oct 23 j 04:42	8° $\underline{\text{A}}$ 13'20	2°00'56	opposition	-2793 May 12 j 07:52	26° $\underline{\text{A}}$ 49'08	1°48'39
max. Earth dist.	-2802 Oct 22 j 22:23	8° $\underline{\text{A}}$ 12'45	31.26129 AU	min. Earth dist.	-2793 May 12 j 06:48	26° $\underline{\text{A}}$ 49'12	29.21589 AU
retrograde	-2801 Feb 03 j 06:02	10° $\underline{\text{A}}$ 41'42		direct	-2793 Jul 31 j 13:06	25° $\underline{\text{A}}$ 25'47	
opposition	-2801 Apr 23 j 23:49	9° $\underline{\text{A}}$ 19'02	2°08'21				
min. Earth dist.	-2801 Apr 24 j 06:06	9° $\underline{\text{A}}$ 18'36	29.26120 AU	conjunction	-2793 Nov 11 j 14:56	27° $\underline{\text{A}}$ 53'54	1°40'13
direct	-2801 Jul 13 j 16:09	7° $\underline{\text{A}}$ 55'17		minimum elong	-2793 Nov 11 j 14:56	27° $\underline{\text{A}}$ 53'54	1°40'10
				max. Earth dist.	-2793 Nov 11 j 16:01	27° $\underline{\text{A}}$ 54'00	31.21057 AU
conjunction	-2801 Oct 25 j 13:41	10° $\underline{\text{A}}$ 24'03	1°59'18		-2792 Jan 16 j 14:55	0° M	
minimum elong	-2801 Oct 25 j 13:41	10° $\underline{\text{A}}$ 24'03	1°59'17	retrograde	-2792 Feb 23 j 12:18	0° M 23'34	
max. Earth dist.	-2801 Oct 25 j 08:04	10° $\underline{\text{A}}$ 23'31	31.25856 AU		-2792 Apr 02 j 19:49	30° R $\underline{\text{A}}$	
retrograde	-2800 Feb 05 j 19:04	12° $\underline{\text{A}}$ 52'34		opposition	-2792 May 13 j 21:04	29° $\underline{\text{A}}$ 00'20	1°45'27
opposition	-2800 Apr 25 j 12:38	11° $\underline{\text{A}}$ 29'53	2°06'30	min. Earth dist.	-2792 May 13 j 19:48	29° $\underline{\text{A}}$ 00'25	29.20727 AU
min. Earth dist.	-2800 Apr 25 j 16:56	11° $\underline{\text{A}}$ 29'35	29.25843 AU	direct	-2792 Aug 02 j 00:25	27° $\underline{\text{A}}$ 36'59	
direct	-2800 Jul 15 j 04:28	10° $\underline{\text{A}}$ 06'14			-2792 Nov 10 j 19:16	0° M	
conjunction	-2800 Oct 26 j 22:39	12° $\underline{\text{A}}$ 34'57	1°57'29	conjunction	-2792 Nov 12 j 23:58	0° M 05'00	1°37'09
minimum elong	-2800 Oct 26 j 22:39	12° $\underline{\text{A}}$ 34'57	1°57'29	minimum elong	-2792 Nov 12 j 23:58	0° M 05'00	1°37'06
max. Earth dist.	-2800 Oct 26 j 18:00	12° $\underline{\text{A}}$ 34'31	31.25572 AU	max. Earth dist.	-2792 Nov 13 j 02:05	0° M 05'12	31.20244 AU
retrograde	-2799 Feb 07 j 07:37	15° $\underline{\text{A}}$ 03'39		retrograde	-2791 Feb 25 j 01:11	2° M 34'48	
opposition	-2799 Apr 28 j 01:45	13° $\underline{\text{A}}$ 40'56	2°04'28	opposition	-2791 May 16 j 10:04	1° M 11'28	1°42'05
min. Earth dist.	-2799 Apr 28 j 06:12	13° $\underline{\text{A}}$ 40'38	29.25545 AU	min. Earth dist.	-2791 May 16 j 06:36	1° M 11'42	29.19949 AU
direct	-2799 Jul 17 j 15:22	12° $\underline{\text{A}}$ 17'22			-2791 Jul 08 j 05:27	30° R $\underline{\text{A}}$	
				direct	-2791 Aug 04 j 12:00	29° $\underline{\text{A}}$ 48'09	
conjunction	-2799 Oct 29 j 07:50	14° $\underline{\text{A}}$ 46'02	1°55'30		-2791 Aug 31 j 04:55	0° M	
minimum elong	-2799 Oct 29 j 07:50	14° $\underline{\text{A}}$ 46'02	1°55'28				
max. Earth dist.	-2799 Oct 29 j 04:22	14° $\underline{\text{A}}$ 45'43	31.25252 AU	conjunction	-2791 Nov 15 j 09:09	2° M 16'05	1°33'56
retrograde	-2798 Feb 09 j 18:13	17° $\underline{\text{A}}$ 14'54		minimum elong	-2791 Nov 15 j 09:09	2° M 16'05	1°33'53
opposition	-2798 Apr 30 j 14:34	15° $\underline{\text{A}}$ 52'10	2°02'16	max. Earth dist.	-2791 Nov 15 j 12:15	2° M 16'22	31.19512 AU
min. Earth dist.	-2798 Apr 30 j 17:23	15° $\underline{\text{A}}$ 51'58	29.25173 AU	retrograde	-2790 Feb 27 j 13:31	4° M 46'02	
direct	-2798 Jul 20 j 04:01	14° $\underline{\text{A}}$ 28'40		opposition	-2790 May 18 j 23:04	3° M 22'37	1°38'35
				min. Earth dist.	-2790 May 18 j 19:28	3° M 22'52	29.19270 AU
conjunction	-2798 Oct 31 j 16:58	16° $\underline{\text{A}}$ 57'17	1°53'21	direct	-2790 Aug 06 j 21:54	1° M 59'21	
minimum elong	-2798 Oct 31 j 16:58	16° $\underline{\text{A}}$ 57'17	1°53'20				
max. Earth dist.	-2798 Oct 31 j 13:25	16° $\underline{\text{A}}$ 56'57	31.24829 AU	conjunction	-2790 Nov 17 j 18:24	4° M 27'13	1°30'35
retrograde	-2797 Feb 12 j 06:04	19° $\underline{\text{A}}$ 26'19		minimum elong	-2790 Nov 17 j 18:24	4° M 27'13	1°30'33
opposition	-2797 May 03 j 03:40	18° $\underline{\text{A}}$ 03'32	1°59'52	max. Earth dist.	-2790 Nov 17 j 23:07	4° M 27'40	31.18888 AU
min. Earth dist.	-2797 May 03 j 06:25	18° $\underline{\text{A}}$ 03'21	29.24694 AU	retrograde	-2789 Mar 02 j 01:04	6° M 57'19	

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Attention, astronomical year style is used: The year -2789 in astronomical counting style is the year 2790 BCE in historical counting style.

opposition	-2789 May 21 j 12:03	5°M33'52	1°34'55	opposition	-2781 Jun 08 j 21:38	23°M09'05	1°01'02
min. Earth dist.	-2789 May 21 j 06:24	5°M34'15	29.18671 AU	min. Earth dist.	-2781 Jun 08 j 11:03	23°M09'48	29.12561 AU
direct	-2789 Aug 09 j 10:37	4°M10'39		direct	-2781 Aug 27 j 03:05	21°M46'12	
conjunction	-2789 Nov 20 j 03:28	6°M38'28	1°27'05	conjunction	-2781 Dec 07 j 08:27	24°M13'39	0°54'58
minimum elong	-2789 Nov 20 j 03:28	6°M38'28	1°27'02	minimum elong	-2781 Dec 07 j 08:28	24°M13'39	0°54'54
max. Earth dist.	-2789 Nov 20 j 08:27	6°M38'56	31.18327 AU	max. Earth dist.	-2781 Dec 07 j 20:14	24°M14'46	31.11964 AU
retrograde	-2788 Mar 03 j 14:12	9°M08'44		retrograde	-2780 Mar 21 j 14:39	26°M45'13	
opposition	-2788 May 23 j 01:16	7°M45'14	1°31'07	opposition	-2780 Jun 10 j 10:43	25°M21'13	0°56'20
min. Earth dist.	-2788 May 22 j 19:09	7°M45'39	29.18136 AU	min. Earth dist.	-2780 Jun 09 j 22:16	25°M22'03	29.11432 AU
direct	-2788 Aug 10 j 21:44	6°M22'06		direct	-2780 Aug 28 j 16:10	23°M58'19	
conjunction	-2788 Nov 21 j 12:53	8°M49'52	1°23'28	conjunction	-2780 Dec 08 j 18:12	26°M25'43	0°50'32
minimum elong	-2788 Nov 21 j 12:53	8°M49'52	1°23'26	minimum elong	-2780 Dec 08 j 18:12	26°M25'43	0°50'28
max. Earth dist.	-2788 Nov 21 j 19:54	8°M50'32	31.17809 AU	max. Earth dist.	-2780 Dec 09 j 06:01	26°M26'50	31.10856 AU
retrograde	-2787 Mar 06 j 01:28	11°M20'19		retrograde	-2779 Mar 24 j 04:45	28°M57'25	
opposition	-2787 May 25 j 14:22	9°M56'47	1°27'11	opposition	-2779 Jun 12 j 23:46	27°M33'19	0°51'33
min. Earth dist.	-2787 May 25 j 07:04	9°M57'17	29.17607 AU	min. Earth dist.	-2779 Jun 12 j 11:02	27°M34'11	29.10366 AU
direct	-2787 Aug 13 j 10:28	8°M33'43		direct	-2779 Aug 31 j 03:20	26°M10'25	
conjunction	-2787 Nov 23 j 22:12	11°M01'27	1°19'43	conjunction	-2779 Dec 11 j 04:05	28°M37'47	0°46'01
minimum elong	-2787 Nov 23 j 22:12	11°M01'27	1°19'39	minimum elong	-2779 Dec 11 j 04:06	28°M37'47	0°45'56
max. Earth dist.	-2787 Nov 24 j 05:04	11°M02'06	31.17279 AU	max. Earth dist.	-2779 Dec 11 j 17:57	28°M39'06	31.09830 AU
retrograde	-2786 Mar 08 j 14:01	13°M32'06			-2778 Jan 18 j 07:48	0°M	
opposition	-2786 May 28 j 03:33	12°M08'32	1°23'06	retrograde	-2778 Mar 26 j 16:20	1°M09'37	
min. Earth dist.	-2786 May 27 j 19:28	12°M09'05	29.17051 AU		-2778 Jun 06 j 13:35	30°M	
direct	-2786 Aug 15 j 20:43	10°M45'32		opposition	-2778 Jun 15 j 12:44	29°M45'27	0°46'41
conjunction	-2786 Nov 26 j 07:48	13°M13'14	1°15'51	min. Earth dist.	-2778 Jun 14 j 22:37	29°M46'24	29.09378 AU
minimum elong	-2786 Nov 26 j 07:49	13°M13'14	1°15'48	direct	-2778 Sep 02 j 16:07	28°M22'33	
max. Earth dist.	-2786 Nov 26 j 16:21	13°M14'03	31.16677 AU		-2778 Nov 21 j 05:42	0°M	
retrograde	-2785 Jan 17 j 10:51	15°M		conjunction	-2778 Dec 13 j 13:51	0°M49'54	0°41'26
	-2785 Mar 11 j 00:12	15°M44'03		minimum elong	-2778 Dec 13 j 13:51	0°M49'54	0°41'22
	-2785 May 05 j 07:17	15°M		max. Earth dist.	-2778 Dec 14 j 03:42	0°M51'12	31.08899 AU
opposition	-2785 May 30 j 16:44	14°M20'27	1°18'55	retrograde	-2777 Mar 29 j 05:04	3°M21'53	
min. Earth dist.	-2785 May 30 j 08:23	14°M21'01	29.16394 AU	min. Earth dist.	-2777 Jun 17 j 10:39	1°M58'40	29.08499 AU
direct	-2785 Aug 18 j 08:38	12°M57'31		opposition	-2777 Jun 18 j 01:42	1°M57'39	0°41'45
	-2785 Nov 17 j 14:49	15°M		direct	-2777 Sep 05 j 02:31	0°M34'47	
conjunction	-2785 Nov 28 j 17:26	15°M25'11	1°11'52	conjunction	-2777 Dec 15 j 23:52	3°M02'07	0°36'47
minimum elong	-2785 Nov 28 j 17:26	15°M25'11	1°11'48	minimum elong	-2777 Dec 15 j 23:52	3°M02'07	0°36'42
max. Earth dist.	-2785 Nov 29 j 01:48	15°M25'59	31.15979 AU	max. Earth dist.	-2777 Dec 16 j 15:38	3°M03'36	31.08065 AU
retrograde	-2784 Mar 12 j 13:34	17°M56'11		retrograde	-2776 Mar 30 j 15:52	5°M34'16	
opposition	-2784 Jun 01 j 06:00	16°M32'32	1°14'36	opposition	-2776 Jun 19 j 14:46	4°M09'59	0°36'45
min. Earth dist.	-2784 May 31 j 20:16	16°M33'12	29.15629 AU	min. Earth dist.	-2776 Jun 18 j 23:07	4°M11'03	29.07704 AU
direct	-2784 Aug 19 j 18:52	15°M09'38		direct	-2776 Sep 06 j 14:56	2°M47'10	
conjunction	-2784 Nov 30 j 03:09	17°M37'16	1°07'47	conjunction	-2776 Dec 17 j 09:49	5°M14'29	0°32'05
minimum elong	-2784 Nov 30 j 03:09	17°M37'16	1°07'44	minimum elong	-2776 Dec 17 j 09:49	5°M14'29	0°32'01
max. Earth dist.	-2784 Nov 30 j 12:32	17°M38'09	31.15140 AU	max. Earth dist.	-2776 Dec 18 j 01:47	5°M15'59	31.07318 AU
retrograde	-2783 Mar 15 j 00:46	20°M08'26		retrograde	-2775 Apr 02 j 05:56	7°M46'48	
opposition	-2783 Jun 03 j 19:23	18°M44'43	1°10'11	min. Earth dist.	-2775 Jun 21 j 10:38	6°M23'38	29.06977 AU
min. Earth dist.	-2783 Jun 03 j 10:01	18°M45'21	29.14715 AU	opposition	-2775 Jun 22 j 03:47	6°M22'28	0°31'41
direct	-2783 Aug 22 j 06:02	17°M21'50		direct	-2775 Sep 09 j 01:31	4°M59'41	
conjunction	-2783 Dec 02 j 13:01	19°M49'24	1°03'36	conjunction	-2775 Dec 19 j 20:04	7°M27'00	0°27'19
minimum elong	-2783 Dec 02 j 13:01	19°M49'24	1°03'32	minimum elong	-2775 Dec 19 j 20:04	7°M27'00	0°27'14
max. Earth dist.	-2783 Dec 02 j 22:54	19°M50'21	31.14173 AU	max. Earth dist.	-2775 Dec 20 j 13:07	7°M28'37	31.06596 AU
retrograde	-2782 Mar 17 j 13:56	22°M20'42		retrograde	-2774 Apr 04 j 16:25	9°M59'30	
opposition	-2782 Jun 06 j 08:23	20°M56'55	1°05'39	opposition	-2774 Jun 24 j 16:43	8°M35'08	0°26'34
min. Earth dist.	-2782 Jun 05 j 21:27	20°M57'39	29.13678 AU	min. Earth dist.	-2774 Jun 23 j 23:53	8°M36'17	29.06259 AU
direct	-2782 Aug 24 j 17:20	19°M34'02		direct	-2774 Sep 11 j 12:10	7°M12'24	
conjunction	-2782 Dec 04 j 22:46	22°M01'33	0°59'20	conjunction	-2774 Dec 22 j 06:25	9°M39'43	0°22'31
minimum elong	-2782 Dec 04 j 22:47	22°M01'33	0°59'16	minimum elong	-2774 Dec 22 j 06:25	9°M39'43	0°22'27
max. Earth dist.	-2782 Dec 05 j 09:02	22°M02'31	31.13087 AU	max. Earth dist.	-2774 Dec 23 j 00:09	9°M41'24	31.05878 AU
retrograde	-2781 Mar 20 j 02:27	24°M33'00		retrograde	-2773 Apr 07 j 05:28	12°M12'22	

Attention, astronomical year style is used: The year -2773 in astronomical counting style is the year 2774 BCE in historical counting style.

min. Earth dist.	-2773 Jun 26 j 11:21	10° \mathring{A} 49'14	29.05513 AU	max. Earth dist.	-2766 Jan 07 j 06:03	25° \mathring{A} 12'16	30.98759 AU
opposition	-2773 Jun 27 j 05:42	10° \mathring{A} 47'59	0°21'24	retrograde	-2766 Apr 23 j 01:26	27° \mathring{A} 43'44	
direct	-2773 Sep 13 j 22:47	9° \mathring{A} 25'15		opposition	-2766 Jul 12 j 23:54	26° \mathring{A} 18'47	0°-15'-11
				min. Earth dist.	-2766 Jul 12 j 02:30	26° \mathring{A} 20'15	28.98290 AU
conjunction	-2773 Dec 24 j 16:44	11° \mathring{A} 52'35	0°17'40	direct	-2766 Sep 29 j 07:10	24° \mathring{A} 55'53	
minimum elong	-2773 Dec 24 j 16:44	11° \mathring{A} 52'35	0°17'35				
max. Earth dist.	-2773 Dec 25 j 10:38	11° \mathring{A} 54'17	31.05093 AU	conjunction	-2765 Jan 08 j 20:07	27° \mathring{A} 23'09	0°-16'-36
retrograde	-2772 Apr 08 j 18:16	14° \mathring{A} 25'24		minimum elong	-2765 Jan 08 j 20:07	27° \mathring{A} 23'09	0°16'41
opposition	-2772 Jun 28 j 18:54	13° \mathring{A} 00'57	0°16'13	max. Earth dist.	-2765 Jan 09 j 18:00	27° \mathring{A} 25'13	30.97796 AU
min. Earth dist.	-2772 Jun 28 j 01:12	13° \mathring{A} 02'10	29.04692 AU	retrograde	-2765 Apr 25 j 12:03	29° \mathring{A} 56'43	
direct	-2772 Sep 15 j 07:59	11° \mathring{A} 38'15		opposition	-2765 Jul 15 j 12:37	28° \mathring{A} 31'43	0°-20'-23
				min. Earth dist.	-2765 Jul 14 j 15:21	28° \mathring{A} 33'10	28.97398 AU
conjunction	-2772 Dec 26 j 03:28	14° \mathring{A} 05'34	0°12'49	direct	-2765 Oct 01 j 18:00	27° \mathring{A} 08'48	
minimum elong	-2772 Dec 26 j 03:27	14° \mathring{A} 05'34	0°12'45				
behind sun begin	-2772 Dec 25 j 23:22	14° \mathring{A} 05'12		conjunction	-2764 Jan 11 j 07:01	29° \mathring{A} 36'06	0°-21'-27
behind sun end	-2772 Dec 26 j 07:33	14° \mathring{A} 05'57		minimum elong	-2764 Jan 11 j 07:01	29° \mathring{A} 36'06	0°21'33
max. Earth dist.	-2772 Dec 26 j 22:25	14° \mathring{A} 07'22	31.04222 AU	max. Earth dist.	-2764 Jan 12 j 05:47	29° \mathring{A} 38'15	30.96979 AU
retrograde	-2771 Apr 11 j 07:27	16° \mathring{A} 38'31			-2764 Jan 21 j 20:07	0° \mathring{A}	
opposition	-2771 Jul 01 j 07:47	15° \mathring{A} 14'00	0°10'59	retrograde	-2764 Apr 27 j 01:08	2° \mathring{A} 09'47	
min. Earth dist.	-2771 Jun 30 j 12:50	15° \mathring{A} 15'18	29.03758 AU	min. Earth dist.	-2764 Jul 16 j 02:16	0° \mathring{A} 46'20	28.96644 AU
direct	-2771 Sep 17 j 20:47	13° \mathring{A} 51'17		opposition	-2764 Jul 17 j 01:11	0° \mathring{A} 44'45	0°-25'-33
					-2764 Aug 14 j 14:26	30° \mathring{A}	
conjunction	-2771 Dec 28 j 14:07	16° \mathring{A} 18'37	0°07'56	direct	-2764 Oct 03 j 04:36	29° \mathring{A} 21'51	
minimum elong	-2771 Dec 28 j 14:07	16° \mathring{A} 18'37	0°07'51		-2764 Nov 19 j 18:39	0° \mathring{A}	
behind sun begin	-2771 Dec 28 j 08:19	16° \mathring{A} 18'05					
behind sun end	-2771 Dec 28 j 19:54	16° \mathring{A} 19'08		conjunction	-2763 Jan 12 j 18:06	1° \mathring{A} 49'13	0°-26'-16
max. Earth dist.	-2771 Dec 29 j 08:22	16° \mathring{A} 20'20	31.03227 AU	minimum elong	-2763 Jan 12 j 18:06	1° \mathring{A} 49'13	0°26'21
retrograde	-2770 Apr 13 j 21:57	18° \mathring{A} 51'40		max. Earth dist.	-2763 Jan 13 j 17:06	1° \mathring{A} 51'23	30.96276 AU
opposition	-2770 Jul 03 j 20:51	17° \mathring{A} 27'05	0°05'45	retrograde	-2763 Apr 29 j 13:43	4° \mathring{A} 23'02	
min. Earth dist.	-2770 Jul 03 j 02:16	17° \mathring{A} 28'21	29.02710 AU	opposition	-2763 Jul 19 j 13:44	2° \mathring{A} 57'59	0°-30'-42
direct	-2770 Sep 20 j 07:26	16° \mathring{A} 04'19		min. Earth dist.	-2763 Jul 18 j 15:24	2° \mathring{A} 59'31	28.96004 AU
				direct	-2763 Oct 05 j 13:13	1° \mathring{A} 35'06	
conjunction	-2770 Dec 31 j 00:53	18° \mathring{A} 31'38	0°03'03				
minimum elong	-2770 Dec 31 j 00:52	18° \mathring{A} 31'38	0°02'59	conjunction	-2762 Jan 15 j 05:27	4° \mathring{A} 02'31	0°-31'-4
behind sun begin	-2770 Dec 30 j 18:27	18° \mathring{A} 31'03		minimum elong	-2762 Jan 15 j 05:27	4° \mathring{A} 02'31	0°31'10
behind sun end	-2770 Dec 31 j 07:16	18° \mathring{A} 32'13		max. Earth dist.	-2762 Jan 16 j 05:42	4° \mathring{A} 04'49	30.95681 AU
max. Earth dist.	-2770 Dec 31 j 20:36	18° \mathring{A} 33'30	31.02126 AU	retrograde	-2762 May 02 j 02:56	6° \mathring{A} 36'28	
retrograde	-2769 Apr 16 j 09:52	21° \mathring{A} 04'47		min. Earth dist.	-2762 Jul 21 j 02:32	5° \mathring{A} 13'04	28.95440 AU
opposition	-2769 Jul 06 j 09:44	19° \mathring{A} 40'06	0°00'30	opposition	-2762 Jul 22 j 02:12	5° \mathring{A} 11'26	0°-35'-48
min. Earth dist.	-2769 Jul 05 j 14:21	19° \mathring{A} 41'25	29.01565 AU	direct	-2762 Oct 08 j 01:22	3° \mathring{A} 48'35	
desc. node	-2769 Aug 10 j 23:47	18° \mathring{A} 46'15					
direct	-2769 Sep 22 j 20:14	18° \mathring{A} 17'18		conjunction	-2761 Jan 17 j 16:38	6° \mathring{A} 16'04	0°-35'-49
				minimum elong	-2761 Jan 17 j 16:38	6° \mathring{A} 16'04	0°35'55
conjunction	-2768 Jan 02 j 11:32	20° \mathring{A} 44'35	0°-1'-58	max. Earth dist.	-2761 Jan 18 j 16:21	6° \mathring{A} 18'18	30.95135 AU
minimum elong	-2768 Jan 02 j 11:32	20° \mathring{A} 44'35	0°02'05	retrograde	-2761 May 04 j 17:32	8° \mathring{A} 50'10	
behind sun begin	-2768 Jan 02 j 05:06	20° \mathring{A} 44'00		opposition	-2761 Jul 24 j 14:52	7° \mathring{A} 25'07	0°-40'-52
behind sun end	-2768 Jan 02 j 17:58	20° \mathring{A} 45'10		min. Earth dist.	-2761 Jul 23 j 15:37	7° \mathring{A} 26'44	28.94915 AU
max. Earth dist.	-2768 Jan 03 j 06:49	20° \mathring{A} 46'24	31.00973 AU	direct	-2761 Oct 10 j 10:56	6° \mathring{A} 02'18	
retrograde	-2768 Apr 17 j 23:47	23° \mathring{A} 17'50					
opposition	-2768 Jul 07 j 22:37	21° \mathring{A} 53'02	0°-4'-43	conjunction	-2760 Jan 20 j 04:19	8° \mathring{A} 29'52	0°-40'-31
min. Earth dist.	-2768 Jul 07 j 02:48	21° \mathring{A} 54'24	29.00417 AU	minimum elong	-2760 Jan 20 j 04:19	8° \mathring{A} 29'52	0°40'37
direct	-2768 Sep 24 j 07:12	20° \mathring{A} 30'12		max. Earth dist.	-2760 Jan 21 j 05:23	8° \mathring{A} 32'14	30.94602 AU
				retrograde	-2760 May 06 j 06:22	11° \mathring{A} 04'05	
conjunction	-2767 Jan 03 j 22:21	22° \mathring{A} 57'28	0°-6'-52	min. Earth dist.	-2760 Jul 25 j 03:38	9° \mathring{A} 40'41	28.94364 AU
minimum elong	-2767 Jan 03 j 22:21	22° \mathring{A} 57'28	0°06'58	opposition	-2760 Jul 26 j 03:23	9° \mathring{A} 39'03	0°-45'-51
behind sun begin	-2767 Jan 03 j 16:22	22° \mathring{A} 56'55		direct	-2760 Oct 11 j 22:40	8° \mathring{A} 16'13	
behind sun end	-2767 Jan 04 j 04:20	22° \mathring{A} 58'00					
max. Earth dist.	-2767 Jan 04 j 19:13	22° \mathring{A} 59'26	30.99828 AU	conjunction	-2759 Jan 21 j 16:02	10° \mathring{A} 43'52	0°-45'-10
retrograde	-2767 Apr 20 j 11:32	25° \mathring{A} 30'48		minimum elong	-2759 Jan 21 j 16:02	10° \mathring{A} 43'52	0°45'15
opposition	-2767 Jul 10 j 11:24	24° \mathring{A} 05'55	0°-9'-57	max. Earth dist.	-2759 Jan 22 j 16:08	10° \mathring{A} 46'09	30.94022 AU
min. Earth dist.	-2767 Jul 09 j 15:18	24° \mathring{A} 07'18	28.99301 AU	retrograde	-2759 May 08 j 21:46	13° \mathring{A} 18'12	
direct	-2767 Sep 26 j 20:08	22° \mathring{A} 43'02		opposition	-2759 Jul 28 j 16:00	11° \mathring{A} 53'09	0°-50'-47
				min. Earth dist.	-2759 Jul 27 j 16:25	11° \mathring{A} 54'46	28.93751 AU
conjunction	-2766 Jan 06 j 09:12	25° \mathring{A} 10'18	0°-11'-44	direct	-2759 Oct 14 j 09:38	10° \mathring{A} 30'19	
minimum elong	-2766 Jan 06 j 09:12	25° \mathring{A} 10'18	0°11'51				
behind sun begin	-2766 Jan 06 j 04:40	25° \mathring{A} 09'53		conjunction	-2758 Jan 24 j 04:03	12° \mathring{A} 58'02	0°-49'-44
behind sun end	-2766 Jan 06 j 13:43	25° \mathring{A} 10'43		minimum elong	-2758 Jan 24 j 04:03	12° \mathring{A} 58'02	0°49'50

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Attention, astronomical year style is used: The year -2758 in astronomical counting style is the year 2759 BCE in historical counting style.

max. Earth dist.	-2758 Jan 25 j 04:58	13° $\overline{300}$ '23	30.93341 AU	max. Earth dist.	-2750 Feb 12 j 06:50	0° \approx 53'04	30.87782 AU
retrograde	-2758 May 11 j 11:08	15° $\overline{332}$ '26		retrograde	-2750 May 29 j 19:18	3° \approx 25'27	
min. Earth dist.	-2758 Jul 30 j 05:17	14° $\overline{308}$ '57	28.93018 AU	min. Earth dist.	-2750 Aug 17 j 05:51	2° \approx 01'43	28.87735 AU
opposition	-2758 Jul 31 j 04:28	14° $\overline{307}$ '21	0°-55'-39	opposition	-2750 Aug 18 j 06:04	2° \approx 00'02	-1°-30'-56
direct	-2758 Oct 16 j 22:53	12° $\overline{344}$ '30		direct	-2750 Nov 03 j 15:21	0° \approx 36'49	
conjunction	-2757 Jan 26 j 16:01	15° $\overline{312}$ '15	0°-54'-15	conjunction	-2749 Feb 13 j 18:12	3° \approx 04'58	-1°-26'-50
minimum elong	-2757 Jan 26 j 16:01	15° $\overline{312}$ '15	0°54'20	minimum elong	-2749 Feb 13 j 18:12	3° \approx 04'58	1°26'55
max. Earth dist.	-2757 Jan 27 j 16:11	15° $\overline{314}$ '32	30.92568 AU	max. Earth dist.	-2749 Feb 14 j 20:33	3° \approx 07'27	30.87508 AU
retrograde	-2757 May 14 j 01:30	17° $\overline{346}$ '43		retrograde	-2749 Jun 01 j 08:37	5° \approx 39'47	
opposition	-2757 Aug 02 j 16:58	16° $\overline{321}$ '34	-1°00'-25	opposition	-2749 Aug 20 j 18:05	4° \approx 14'23	-1°-34'-48
min. Earth dist.	-2757 Aug 01 j 17:12	16° $\overline{323}$ '13	28.92205 AU	min. Earth dist.	-2749 Aug 19 j 18:13	4° \approx 16'03	28.87497 AU
direct	-2757 Oct 19 j 10:28	14° $\overline{358}$ '40		direct	-2749 Nov 06 j 03:41	2° \approx 51'12	
conjunction	-2756 Jan 29 j 03:58	17° $\overline{326}$ '26	0°-58'-40	conjunction	-2748 Feb 16 j 06:54	5° \approx 19'27	-1°-30'-23
minimum elong	-2756 Jan 29 j 03:57	17° $\overline{326}$ '26	0°58'46	minimum elong	-2748 Feb 16 j 06:54	5° \approx 19'27	1°30'28
max. Earth dist.	-2756 Jan 30 j 04:30	17° $\overline{328}$ '45	30.91710 AU	max. Earth dist.	-2748 Feb 17 j 08:26	5° \approx 21'51	30.87293 AU
retrograde	-2756 May 15 j 12:59	20° $\overline{300}$ '58		retrograde	-2748 Jun 02 j 23:38	7° \approx 54'20	
min. Earth dist.	-2756 Aug 03 j 06:32	18° $\overline{337}$ '20	28.91333 AU	min. Earth dist.	-2748 Aug 21 j 05:55	6° \approx 30'39	28.87287 AU
opposition	-2756 Aug 04 j 05:27	18° $\overline{335}$ '44	-1°-5'-6	opposition	-2748 Aug 22 j 06:04	6° \approx 28'58	-1°-38'-32
direct	-2756 Oct 20 j 22:14	17° $\overline{312}$ '47		direct	-2748 Nov 07 j 14:57	5° \approx 05'46	
conjunction	-2755 Jan 30 j 16:08	19° $\overline{340}$ '34	-1°-3'00	conjunction	-2747 Feb 17 j 20:01	7° \approx 34'08	-1°-33'-48
minimum elong	-2755 Jan 30 j 16:07	19° $\overline{340}$ '34	1°03'05	minimum elong	-2747 Feb 17 j 20:00	7° \approx 34'08	1°33'52
max. Earth dist.	-2755 Jan 31 j 16:53	19° $\overline{342}$ '54	30.90841 AU	max. Earth dist.	-2747 Feb 18 j 21:31	7° \approx 36'32	30.87052 AU
retrograde	-2755 May 18 j 02:52	22° $\overline{315}$ '06		retrograde	-2747 Jun 05 j 12:43	10° \approx 09'04	
opposition	-2755 Aug 06 j 17:32	20° $\overline{349}$ '49	-1°-9'-42	opposition	-2747 Aug 24 j 17:58	8° \approx 43'44	-1°-42'-6
min. Earth dist.	-2755 Aug 05 j 17:37	20° $\overline{351}$ '29	28.90477 AU	min. Earth dist.	-2747 Aug 23 j 19:07	8° \approx 45'20	28.87025 AU
direct	-2755 Oct 23 j 10:02	19° $\overline{326}$ '47		direct	-2747 Nov 10 j 02:33	7° \approx 20'32	
conjunction	-2754 Feb 02 j 04:14	21° $\overline{354}$ '36	-1°-7'-15	conjunction	-2746 Feb 20 j 09:14	9° \approx 49'01	-1°-37'-4
minimum elong	-2754 Feb 02 j 04:14	21° $\overline{354}$ '36	1°07'20	minimum elong	-2746 Feb 20 j 09:14	9° \approx 49'01	1°37'09
max. Earth dist.	-2754 Feb 03 j 04:47	21° $\overline{356}$ '55	30.89998 AU	max. Earth dist.	-2746 Feb 21 j 10:13	9° \approx 51'22	30.86751 AU
retrograde	-2754 May 20 j 14:38	24° $\overline{329}$ '11		retrograde	-2746 Jun 08 j 04:02	12° \approx 23'58	
min. Earth dist.	-2754 Aug 08 j 06:48	23° $\overline{305}$ '26	28.89688 AU	min. Earth dist.	-2746 Aug 26 j 06:35	11° \approx 00'17	28.86677 AU
opposition	-2754 Aug 09 j 05:50	23° $\overline{303}$ '50	-1°-14'-10	opposition	-2746 Aug 27 j 05:53	10° \approx 58'39	-1°-45'-32
direct	-2754 Oct 25 j 19:49	21° $\overline{340}$ '45		direct	-2746 Nov 12 j 14:43	9° \approx 35'25	
conjunction	-2753 Feb 04 j 16:22	24° $\overline{308}$ '35	-1°-11'-23	conjunction	-2745 Feb 22 j 22:21	12° \approx 04'00	-1°-40'-12
minimum elong	-2753 Feb 04 j 16:22	24° $\overline{308}$ '35	1°11'28	minimum elong	-2745 Feb 22 j 22:20	12° \approx 04'00	1°40'16
max. Earth dist.	-2753 Feb 05 j 17:59	24° $\overline{311}$ '00	30.89255 AU	max. Earth dist.	-2745 Feb 23 j 22:28	12° \approx 06'16	30.86337 AU
retrograde	-2753 May 23 j 02:36	26° $\overline{343}$ '12		retrograde	-2745 Jun 10 j 16:09	14° \approx 38'59	
opposition	-2753 Aug 11 j 17:56	25° $\overline{317}$ '48	-1°-18'-33	opposition	-2745 Aug 29 j 17:57	13° \approx 13'39	-1°-48'-47
min. Earth dist.	-2753 Aug 10 j 17:41	25° $\overline{319}$ '30	28.89005 AU	min. Earth dist.	-2745 Aug 28 j 20:14	13° \approx 15'10	28.86219 AU
direct	-2753 Oct 28 j 08:03	23° $\overline{354}$ '40		direct	-2745 Nov 15 j 01:04	11° \approx 50'22	
conjunction	-2752 Feb 07 j 04:36	26° $\overline{322}$ '33	-1°-15'-25	conjunction	-2744 Feb 25 j 11:48	14° \approx 19'01	-1°-43'-11
minimum elong	-2752 Feb 07 j 04:35	26° $\overline{322}$ '33	1°15'31	minimum elong	-2744 Feb 25 j 11:47	14° \approx 19'01	1°43'15
max. Earth dist.	-2752 Feb 08 j 05:29	26° $\overline{324}$ '54	30.88632 AU	max. Earth dist.	-2744 Feb 26 j 12:03	14° \approx 21'18	30.85836 AU
retrograde	-2752 May 24 j 15:48	28° $\overline{357}$ '13			-2744 Mar 14 j 20:16	15° \approx	
min. Earth dist.	-2752 Aug 12 j 06:20	27° $\overline{333}$ '26	28.88464 AU	retrograde	-2744 Jun 12 j 04:34	16° \approx 53'59	
opposition	-2752 Aug 13 j 06:04	27° $\overline{331}$ '47	-1°-22'-48	min. Earth dist.	-2744 Aug 30 j 07:33	15° \approx 30'11	28.85678 AU
direct	-2752 Oct 29 j 17:12	26° $\overline{308}$ '36		opposition	-2744 Aug 31 j 05:39	15° \approx 28'38	-1°-51'-53
conjunction	-2751 Feb 08 j 17:06	28° $\overline{336}$ '34	-1°-19'-21	direct	-2744 Sep 17 j 13:32	15° \approx	
minimum elong	-2751 Feb 08 j 17:06	28° $\overline{336}$ '34	1°19'26		-2744 Nov 16 j 13:36	14° \approx 05'17	
max. Earth dist.	-2751 Feb 09 j 19:18	28° $\overline{339}$ '02	30.88148 AU		-2743 Jan 13 j 03:21	15° \approx	
retrograde	-2751 Mar 19 j 15:09	0° \approx		conjunction	-2743 Feb 27 j 01:09	16° \approx 34'00	-1°-46'00
	-2751 May 27 j 04:30	1° \approx 11'16		minimum elong	-2743 Feb 27 j 01:08	16° \approx 34'00	1°46'04
	-2751 Aug 07 j 06:15	30° \approx		max. Earth dist.	-2743 Feb 27 j 23:55	16° \approx 36'08	30.85267 AU
opposition	-2751 Aug 15 j 18:04	29° $\overline{345}$ '50	-1°-26'-56	retrograde	-2743 Jun 14 j 17:25	19° \approx 08'57	
min. Earth dist.	-2751 Aug 14 j 17:44	29° $\overline{347}$ '32	28.88040 AU	opposition	-2743 Sep 02 j 17:27	17° \approx 43'34	-1°-54'-49
direct	-2751 Nov 01 j 04:48	28° $\overline{322}$ '39		min. Earth dist.	-2743 Sep 01 j 20:32	17° \approx 45'02	28.85108 AU
	-2750 Jan 19 j 09:41	0° \approx		direct	-2743 Nov 18 j 23:00	16° \approx 20'08	
conjunction	-2750 Feb 11 j 05:31	0° \approx 50'41	-1°-23'-9	conjunction	-2742 Mar 01 j 14:35	18° \approx 48'55	-1°-48'-39
minimum elong	-2750 Feb 11 j 05:31	0° \approx 50'41	1°23'14	minimum elong	-2742 Mar 01 j 14:35	18° \approx 48'55	1°48'44

Attention, astronomical year style is used: The year -2742 in astronomical counting style is the year 2743 BCE in historical counting style.

max. Earth dist.	-2742 Mar 02 j 14:06	18° \approx 51'08	30.84693 AU	conjunction	-2734 Mar 20 j 03:56	6° \times 48'07	-2°-3'-40
retrograde	-2742 Jun 17 j 05:23	21° \approx 23'49		minimum elong	-2734 Mar 20 j 03:57	6° \times 48'07	2°03'42
min. Earth dist.	-2742 Sep 04 j 07:54	19° \approx 59'54	28.84555 AU	max. Earth dist.	-2734 Mar 20 j 23:17	6° \times 49'55	30.83637 AU
opposition	-2742 Sep 05 j 04:59	19° \approx 58'25	-1°-57'-34	retrograde	-2734 Jul 05 j 17:18	9° \times 22'44	
direct	-2742 Nov 21 j 10:49	18° \approx 34'55		opposition	-2734 Sep 22 j 23:59	7° \times 57'30	-2°-12'-50
				min. Earth dist.	-2734 Sep 22 j 06:52	7° \times 58'42	28.83832 AU
				direct	-2734 Dec 09 j 07:00	6° \times 33'41	
conjunction	-2741 Mar 04 j 03:55	21° \approx 03'46	-1°-51'-9				
minimum elong	-2741 Mar 04 j 03:54	21° \approx 03'45	1°51'13				
max. Earth dist.	-2741 Mar 05 j 02:07	21° \approx 05'51	30.84177 AU	conjunction	-2733 Mar 22 j 18:13	9° \times 03'20	-2°-4'-43
retrograde	-2741 Jun 19 j 18:55	23° \approx 38'38		minimum elong	-2733 Mar 22 j 18:13	9° \times 03'20	2°04'46
opposition	-2741 Sep 07 j 16:32	22° \approx 13'12	-2°00'-9	max. Earth dist.	-2733 Mar 23 j 13:38	9° \times 05'09	30.83682 AU
min. Earth dist.	-2741 Sep 06 j 19:53	22° \approx 14'39	28.84097 AU	retrograde	-2733 Jul 08 j 04:56	11° \times 37'53	
direct	-2741 Nov 23 j 21:43	20° \approx 49'37		opposition	-2733 Sep 25 j 11:11	10° \times 12'40	-2°-13'-51
				min. Earth dist.	-2733 Sep 24 j 18:27	10° \times 13'52	28.83829 AU
conjunction	-2740 Mar 05 j 17:25	23° \approx 18'33	-1°-53'-28	direct	-2733 Dec 11 j 19:17	8° \times 48'49	
minimum elong	-2740 Mar 05 j 17:24	23° \approx 18'33	1°53'32				
max. Earth dist.	-2740 Mar 06 j 16:27	23° \approx 20'42	30.83761 AU	conjunction	-2732 Mar 24 j 08:23	11° \times 18'32	-2°-5'-34
retrograde	-2740 Jun 21 j 07:07	25° \approx 53'23		minimum elong	-2732 Mar 24 j 08:23	11° \times 18'32	2°05'37
min. Earth dist.	-2740 Sep 08 j 07:51	24° \approx 29'22	28.83742 AU	max. Earth dist.	-2732 Mar 25 j 01:42	11° \times 20'09	30.83643 AU
opposition	-2740 Sep 09 j 04:02	24° \approx 27'56	-2°-2'-32	retrograde	-2732 Jul 09 j 17:39	13° \times 53'00	
direct	-2740 Nov 25 j 10:05	23° \approx 04'18		opposition	-2732 Sep 26 j 22:25	12° \times 27'48	-2°-14'-40
				min. Earth dist.	-2732 Sep 26 j 06:43	12° \times 28'55	28.83754 AU
conjunction	-2739 Mar 08 j 06:57	25° \approx 33'19	-1°-55'-37	direct	-2732 Dec 13 j 06:04	11° \times 03'51	
minimum elong	-2739 Mar 08 j 06:57	25° \approx 33'19	1°55'41				
max. Earth dist.	-2739 Mar 09 j 04:54	25° \approx 35'22	30.83477 AU	conjunction	-2731 Mar 26 j 22:44	13° \times 33'39	-2°-6'-15
retrograde	-2739 Jun 23 j 21:31	28° \approx 08'06		minimum elong	-2731 Mar 26 j 22:44	13° \times 33'39	2°06'17
opposition	-2739 Sep 11 j 15:19	26° \approx 42'40	-2°-4'-44	max. Earth dist.	-2731 Mar 27 j 16:12	13° \times 35'17	30.83529 AU
min. Earth dist.	-2739 Sep 10 j 18:49	26° \approx 44'07	28.83534 AU	retrograde	-2731 Jul 12 j 05:00	16° \times 08'00	
direct	-2739 Nov 27 j 21:06	25° \approx 18'58		opposition	-2731 Sep 29 j 09:26	14° \times 42'48	-2°-15'-17
				min. Earth dist.	-2731 Sep 28 j 18:48	14° \times 43'51	28.83616 AU
conjunction	-2738 Mar 10 j 20:34	27° \approx 48'05	-1°-57'-36	direct	-2731 Dec 15 j 18:06	13° \times 18'47	
minimum elong	-2738 Mar 10 j 20:34	27° \approx 48'05	1°57'39				
max. Earth dist.	-2738 Mar 11 j 18:43	27° \approx 50'10	30.83326 AU	conjunction	-2730 Mar 29 j 12:55	15° \times 48'39	-2°-6'-43
	-2738 May 19 j 20:17	0° \times		minimum elong	-2730 Mar 29 j 12:55	15° \times 48'39	2°06'45
retrograde	-2738 Jun 26 j 10:43	0° \times 22'51		max. Earth dist.	-2730 Mar 30 j 04:41	15° \times 50'07	30.83398 AU
	-2738 Aug 03 j 13:38	30° \times		retrograde	-2730 Jul 14 j 18:42	18° \times 22'53	
min. Earth dist.	-2738 Sep 13 j 07:16	28° \approx 58'49	28.83455 AU	opposition	-2730 Oct 01 j 20:24	16° \times 57'41	-2°-15'-41
opposition	-2738 Sep 14 j 02:46	28° \approx 57'26	-2°-6'-45	min. Earth dist.	-2730 Oct 01 j 05:55	16° \times 58'43	28.83497 AU
direct	-2738 Nov 30 j 09:21	27° \approx 33'43		direct	-2730 Dec 18 j 05:27	15° \times 33'34	
	-2737 Mar 12 j 02:53	0° \times					
conjunction	-2737 Mar 13 j 10:06	0° \times 02'56	-1°-59'-23	conjunction	-2729 Apr 01 j 03:02	18° \times 03'30	-2°-7'-1
minimum elong	-2737 Mar 13 j 10:06	0° \times 02'56	1°59'27	minimum elong	-2729 Apr 01 j 03:02	18° \times 03'30	2°07'03
max. Earth dist.	-2737 Mar 14 j 07:54	0° \times 04'58	30.83319 AU	max. Earth dist.	-2729 Apr 01 j 18:43	18° \times 04'58	30.83293 AU
retrograde	-2737 Jun 29 j 01:50	2° \times 37'40		retrograde	-2729 Jul 17 j 06:43	20° \times 37'38	
opposition	-2737 Sep 16 j 14:05	1° \times 12'17	-2°-8'-34	opposition	-2729 Oct 04 j 07:23	19° \times 12'26	-2°-15'-54
min. Earth dist.	-2737 Sep 15 j 18:00	1° \times 13'42	28.83501 AU	min. Earth dist.	-2729 Oct 03 j 18:17	19° \times 13'22	28.83426 AU
	-2737 Nov 06 j 21:26	30° \times		direct	-2729 Dec 20 j 18:07	17° \times 48'14	
direct	-2737 Dec 02 j 22:11	29° \approx 48'33					
	-2737 Dec 28 j 13:18	0° \times		conjunction	-2728 Apr 02 j 17:18	20° \times 18'15	-2°-7'-6
conjunction	-2736 Mar 14 j 23:55	2° \times 17'52	-2°-1'00	minimum elong	-2728 Apr 02 j 17:19	20° \times 18'15	2°07'07
minimum elong	-2736 Mar 14 j 23:55	2° \times 17'52	2°01'03	max. Earth dist.	-2728 Apr 03 j 08:03	20° \times 19'38	30.83277 AU
max. Earth dist.	-2736 Mar 15 j 21:03	2° \times 19'51	30.83400 AU	retrograde	-2728 Jul 18 j 20:45	22° \times 52'15	
retrograde	-2736 Jun 30 j 14:10	4° \times 52'35		opposition	-2728 Oct 05 j 18:04	21° \times 27'04	-2°-15'-53
min. Earth dist.	-2736 Sep 17 j 06:56	3° \times 28'33	28.83619 AU	min. Earth dist.	-2728 Oct 05 j 04:36	21° \times 28'02	28.83462 AU
opposition	-2736 Sep 18 j 01:23	3° \times 27'15	-2°-10'-11	direct	-2728 Dec 22 j 07:19	20° \times 02'49	
direct	-2736 Dec 04 j 08:46	2° \times 03'30					
				conjunction	-2727 Apr 05 j 07:34	22° \times 32'56	-2°-7'00
conjunction	-2735 Mar 17 j 14:01	4° \times 32'56	-2°-2'-25	minimum elong	-2727 Apr 05 j 07:34	22° \times 32'56	2°07'02
minimum elong	-2735 Mar 17 j 14:01	4° \times 32'56	2°02'29	max. Earth dist.	-2727 Apr 05 j 21:38	22° \times 34'14	30.83368 AU
max. Earth dist.	-2735 Mar 18 j 11:05	4° \times 34'55	30.83534 AU	retrograde	-2727 Jul 21 j 08:51	25° \times 06'49	
retrograde	-2735 Jul 03 j 03:53	7° \times 07'36		opposition	-2727 Oct 08 j 04:58	23° \times 41'40	-2°-15'-41
opposition	-2735 Sep 20 j 12:37	5° \times 42'20	-2°-11'-37	min. Earth dist.	-2727 Oct 07 j 17:02	23° \times 42'31	28.83631 AU
min. Earth dist.	-2735 Sep 19 j 18:00	5° \times 43'39	28.83746 AU	direct	-2727 Dec 24 j 18:22	22° \times 17'22	
direct	-2735 Dec 06 j 21:13	4° \times 18'34					
				conjunction	-2726 Apr 07 j 21:44	24° \times 47'34	-2°-6'-43
				minimum elong	-2726 Apr 07 j 21:44	24° \times 47'34	2°06'44
				max. Earth dist.	-2726 Apr 08 j 11:46	24° \times 48'53	30.83616 AU

Attention, astronomical year style is used: The year -2726 in astronomical counting style is the year 2727 BCE in historical counting style.

retrograde	-2726 Jul 23 j 22:34	27° ✕ 21'22		retrograde	-2718 Aug 11 j 00:15	15° Υ 20'08	
opposition	-2726 Oct 10 j 15:40	25° ✕ 56'16	-2°-15'-16	opposition	-2718 Oct 28 j 05:11	13° Υ 55'36	-2°-4'-36
min. Earth dist.	-2726 Oct 10 j 03:16	25° ✕ 57'09	28.83947 AU	min. Earth dist.	-2718 Oct 28 j 00:57	13° Υ 55'55	28.88021 AU
direct	-2726 Dec 27 j 07:13	24° ✕ 31'57		direct	-2717 Jan 14 j 03:23	12° Υ 31'01	
conjunction	-2725 Apr 10 j 11:56	27° ✕ 02'15	-2°-6'-14	conjunction	-2717 Apr 29 j 08:06	15° Υ 02'03	-1°-55'-31
minimum elong	-2725 Apr 10 j 11:56	27° ✕ 02'15	2°06'16	minimum elong	-2717 Apr 29 j 08:06	15° Υ 02'03	1°55'32
max. Earth dist.	-2725 Apr 11 j 00:33	27° ✕ 03'26	30.84011 AU	max. Earth dist.	-2717 Apr 29 j 13:01	15° Υ 02'31	30.88075 AU
retrograde	-2725 Jul 26 j 11:51	29° ✕ 35'57		retrograde	-2717 Aug 13 j 13:39	17° Υ 34'43	
opposition	-2725 Oct 13 j 02:25	28° ✕ 10'56	-2°-14'-38	opposition	-2717 Oct 30 j 15:29	16° Υ 10'12	-2°-2'-23
min. Earth dist.	-2725 Oct 12 j 15:17	28° ✕ 11'44	28.84420 AU	min. Earth dist.	-2717 Oct 30 j 11:18	16° Υ 10'30	28.88371 AU
direct	-2725 Dec 29 j 17:08	26° ✕ 46'36		direct	-2716 Jan 16 j 17:28	14° Υ 45'33	
conjunction	-2724 Apr 12 j 02:23	29° ✕ 17'01	-2°-5'-33	conjunction	-2716 Apr 30 j 22:32	17° Υ 16'37	-1°-53'-23
minimum elong	-2724 Apr 12 j 02:23	29° ✕ 17'01	2°05'34	minimum elong	-2716 Apr 30 j 22:32	17° Υ 16'37	1°53'22
max. Earth dist.	-2724 Apr 12 j 15:16	29° ✕ 18'13	30.84549 AU	max. Earth dist.	-2716 May 01 j 01:47	17° Υ 16'55	30.88447 AU
	-2724 May 01 j 12:45	0° Υ		retrograde	-2716 Aug 15 j 01:57	19° Υ 49'06	
retrograde	-2724 Jul 27 j 23:12	1° Υ 50'38		opposition	-2716 Nov 01 j 02:00	18° Υ 24'37	-2°00'00
opposition	-2724 Oct 14 j 13:05	0° Υ 25'43	-2°-13'-48	min. Earth dist.	-2716 Oct 31 j 23:18	18° Υ 24'48	28.88776 AU
min. Earth dist.	-2724 Oct 14 j 02:11	0° Υ 26'30	28.84994 AU	direct	-2715 Jan 18 j 05:08	16° Υ 59'52	
	-2724 Oct 29 j 20:13	30° ✕		conjunction	-2715 May 03 j 12:58	19° Υ 30'59	-1°-51'-4
direct	-2724 Dec 31 j 05:26	29° ✕ 01'23		minimum elong	-2715 May 03 j 12:58	19° Υ 31'00	1°51'03
	-2723 Mar 01 j 16:02	0° Υ		max. Earth dist.	-2715 May 03 j 16:16	19° Υ 31'18	30.88892 AU
conjunction	-2723 Apr 14 j 16:44	1° Υ 31'55	-2°-4'-41	retrograde	-2715 Aug 17 j 12:59	22° Υ 03'16	
minimum elong	-2723 Apr 14 j 16:44	1° Υ 31'55	2°04'42	opposition	-2715 Nov 03 j 12:18	20° Υ 38'50	-1°-57'-26
max. Earth dist.	-2723 Apr 15 j 03:39	1° Υ 32'56	30.85165 AU	min. Earth dist.	-2715 Nov 03 j 09:50	20° Υ 39'01	28.89261 AU
retrograde	-2723 Jul 30 j 11:43	4° Υ 05'27		direct	-2714 Jan 20 j 18:15	19° Υ 14'03	
opposition	-2723 Oct 16 j 23:44	2° Υ 40'38	-2°-12'-46	conjunction	-2714 May 06 j 03:10	21° Υ 45'12	-1°-48'-35
min. Earth dist.	-2723 Oct 16 j 13:50	2° Υ 41'20	28.85633 AU	minimum elong	-2714 May 06 j 03:11	21° Υ 45'12	1°48'34
direct	-2722 Jan 02 j 15:31	1° Υ 16'18		max. Earth dist.	-2714 May 06 j 04:37	21° Υ 45'20	30.89446 AU
conjunction	-2722 Apr 17 j 07:19	3° Υ 46'58	-2°-3'-37	retrograde	-2714 Aug 20 j 01:23	24° Υ 17'19	
minimum elong	-2722 Apr 17 j 07:20	3° Υ 46'58	2°03'37	opposition	-2714 Nov 05 j 22:40	22° Υ 52'56	-1°-54'-42
max. Earth dist.	-2722 Apr 17 j 18:23	3° Υ 48'00	30.85804 AU	min. Earth dist.	-2714 Nov 05 j 20:54	22° Υ 53'04	28.89885 AU
retrograde	-2722 Aug 01 j 23:13	6° Υ 20'23		direct	-2713 Jan 23 j 04:54	21° Υ 28'06	
opposition	-2722 Oct 19 j 10:28	4° Υ 55'40	-2°-11'-31	conjunction	-2713 May 08 j 17:30	23° Υ 59'19	-1°-45'-56
min. Earth dist.	-2722 Oct 19 j 01:48	4° Υ 56'17	28.86255 AU	minimum elong	-2713 May 08 j 17:31	23° Υ 59'19	1°45'56
direct	-2721 Jan 05 j 02:32	3° Υ 31'19		max. Earth dist.	-2713 May 08 j 19:22	23° Υ 59'30	30.90137 AU
conjunction	-2721 Apr 19 j 21:45	6° Υ 02'05	-2°-2'-21	retrograde	-2713 Aug 22 j 12:00	26° Υ 31'16	
minimum elong	-2721 Apr 19 j 21:45	6° Υ 02'05	2°02'22	opposition	-2713 Nov 08 j 09:04	25° Υ 06'58	-1°-51'-47
max. Earth dist.	-2721 Apr 20 j 06:41	6° Υ 02'55	30.86410 AU	min. Earth dist.	-2713 Nov 08 j 08:14	25° Υ 07'02	28.90628 AU
retrograde	-2721 Aug 04 j 12:16	8° Υ 35'25		direct	-2712 Jan 25 j 16:17	23° Υ 42'07	
opposition	-2721 Oct 21 j 21:12	7° Υ 10'46	-2°-10'-5	conjunction	-2712 May 10 j 07:47	26° Υ 13'24	-1°-43'-8
min. Earth dist.	-2721 Oct 21 j 13:03	7° Υ 11'21	28.86820 AU	minimum elong	-2712 May 10 j 07:48	26° Υ 13'24	1°43'06
direct	-2720 Jan 07 j 13:34	5° Υ 46'23		max. Earth dist.	-2712 May 10 j 07:48	26° Υ 13'24	30.90957 AU
conjunction	-2720 Apr 21 j 12:30	8° Υ 17'15	-2°00'-55	retrograde	-2712 Aug 24 j 00:00	28° Υ 45'13	
minimum elong	-2720 Apr 21 j 12:30	8° Υ 17'15	2°00'55	opposition	-2712 Nov 09 j 19:17	27° Υ 21'01	-1°-48'-41
max. Earth dist.	-2720 Apr 21 j 20:50	8° Υ 18'01	30.86923 AU	min. Earth dist.	-2712 Nov 09 j 18:37	27° Υ 21'04	28.91498 AU
retrograde	-2720 Aug 05 j 23:16	10° Υ 50'26		direct	-2711 Jan 27 j 03:18	25° Υ 56'08	
opposition	-2720 Oct 23 j 07:53	9° Υ 25'50	-2°-8'-26	conjunction	-2711 May 12 j 22:12	28° Υ 27'32	-1°-40'-10
min. Earth dist.	-2720 Oct 23 j 01:37	9° Υ 26'17	28.87284 AU	minimum elong	-2711 May 12 j 22:13	28° Υ 27'32	1°40'09
direct	-2719 Jan 09 j 02:26	8° Υ 01'24		max. Earth dist.	-2711 May 12 j 22:11	28° Υ 27'32	30.91869 AU
conjunction	-2719 Apr 24 j 03:09	10° Υ 32'20	-1°-59'-18		-2711 Jun 26 j 07:54	0° ✕	
minimum elong	-2719 Apr 24 j 03:09	10° Υ 32'20	1°59'18	retrograde	-2711 Aug 26 j 10:15	0° ✕ 59'13	
max. Earth dist.	-2719 Apr 24 j 09:45	10° Υ 32'57	30.87359 AU		-2711 Oct 28 j 10:19	30° ✕ Υ	
retrograde	-2719 Aug 08 j 12:35	13° Υ 05'21		opposition	-2711 Nov 12 j 05:45	29° Υ 35'08	-1°-45'-26
opposition	-2719 Oct 25 j 18:30	11° Υ 40'48	-2°-6'-37	min. Earth dist.	-2711 Nov 12 j 06:42	29° Υ 35'04	28.92433 AU
min. Earth dist.	-2719 Oct 25 j 12:19	11° Υ 41'15	28.87674 AU	direct	-2710 Jan 29 j 15:02	28° Υ 10'16	
direct	-2718 Jan 11 j 15:47	10° Υ 16'18			-2710 Apr 26 j 13:12	0° ✕	
conjunction	-2718 Apr 26 j 17:34	12° Υ 47'17	-1°-57'-30	conjunction	-2710 May 15 j 12:21	0° ✕ 41'46	-1°-37'-2
minimum elong	-2718 Apr 26 j 17:34	12° Υ 47'17	1°57'30	minimum elong	-2710 May 15 j 12:22	0° ✕ 41'46	1°37'00
max. Earth dist.	-2718 Apr 26 j 23:08	12° Υ 47'48	30.87720 AU	max. Earth dist.	-2710 May 15 j 10:46	0° ✕ 41'37	30.92831 AU

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Attention, astronomical year style is used: The year -2710 in astronomical counting style is the year 2711 BCE in historical counting style.

retrograde	-2710 Aug 28 j 23:10	3°♄13'19		retrograde	-2702 Sep 15 j 17:09	21°♄04'25	
opposition	-2710 Nov 14 j 16:03	1°♄49'20	-1°-42'-1	opposition	-2702 Dec 02 j 02:33	19°♄40'56	-1°-9'-47
min. Earth dist.	-2710 Nov 14 j 17:01	1°♄49'16	28.93382 AU	min. Earth dist.	-2702 Dec 02 j 12:00	19°♄40'15	28.98669 AU
direct	-2709 Feb 01 j 03:25	0°♄24'29		direct	-2701 Feb 19 j 05:33	18°♄15'42	
conjunction	-2709 May 18 j 02:47	2°♄56'04	-1°-33'-46	conjunction	-2701 Jun 05 j 19:12	20°♄47'36	-1°-3'-9
minimum elong	-2709 May 18 j 02:47	2°♄56'04	1°33'45	minimum elong	-2701 Jun 05 j 19:13	20°♄47'36	1°03'08
max. Earth dist.	-2709 May 18 j 00:11	2°♄55'50	30.93754 AU	max. Earth dist.	-2701 Jun 05 j 08:05	20°♄46'34	30.99014 AU
retrograde	-2709 Aug 31 j 10:28	5°♄27'30		retrograde	-2701 Sep 18 j 04:57	23°♄17'35	
opposition	-2709 Nov 17 j 02:27	4°♄03'38	-1°-38'-27	opposition	-2701 Dec 04 j 12:34	21°♄54'09	-1°-5'-15
min. Earth dist.	-2709 Nov 17 j 05:34	4°♄03'24	28.94272 AU	min. Earth dist.	-2701 Dec 04 j 21:35	21°♄53'30	28.99471 AU
direct	-2708 Feb 03 j 14:37	2°♄38'45		direct	-2700 Feb 21 j 17:00	20°♄28'53	
conjunction	-2708 May 19 j 17:16	5°♄10'26	-1°-30'-22	conjunction	-2700 Jun 07 j 08:54	23°♄00'49	0°-58'-52
minimum elong	-2708 May 19 j 17:16	5°♄10'26	1°30'20	minimum elong	-2700 Jun 07 j 08:55	23°♄00'49	0°58'49
max. Earth dist.	-2708 May 19 j 13:31	5°♄10'05	30.94606 AU	max. Earth dist.	-2700 Jun 06 j 21:25	22°♄59'45	30.99880 AU
retrograde	-2708 Sep 01 j 23:40	7°♄41'43		retrograde	-2700 Sep 19 j 14:33	25°♄30'38	
opposition	-2708 Nov 18 j 12:50	6°♄17'55	-1°-34'-44	opposition	-2700 Dec 05 j 22:52	24°♄07'17	-1°00'-36
min. Earth dist.	-2708 Nov 18 j 16:14	6°♄17'41	28.95056 AU	min. Earth dist.	-2700 Dec 06 j 09:25	24°♄06'32	29.00403 AU
direct	-2707 Feb 05 j 04:57	4°♄53'02		direct	-2699 Feb 23 j 04:11	22°♄42'01	
conjunction	-2707 May 22 j 07:31	7°♄24'47	-1°-26'-49	conjunction	-2699 Jun 09 j 22:21	25°♄13'59	0°-54'-28
minimum elong	-2707 May 22 j 07:32	7°♄24'47	1°26'48	minimum elong	-2699 Jun 09 j 22:22	25°♄13'59	0°54'26
max. Earth dist.	-2707 May 22 j 01:55	7°♄24'16	30.95335 AU	max. Earth dist.	-2699 Jun 09 j 10:24	25°♄12'52	31.00880 AU
retrograde	-2707 Sep 04 j 11:39	9°♄55'54		retrograde	-2699 Sep 22 j 02:13	27°♄43'39	
opposition	-2707 Nov 20 j 23:17	8°♄32'10	-1°-30'-53	opposition	-2699 Dec 08 j 09:01	26°♄20'23	0°-55'-52
min. Earth dist.	-2707 Nov 21 j 04:26	8°♄31'48	28.95737 AU	min. Earth dist.	-2699 Dec 08 j 19:20	26°♄19'39	29.01436 AU
direct	-2706 Feb 07 j 17:02	7°♄07'14		direct	-2698 Feb 25 j 18:05	24°♄55'08	
conjunction	-2706 May 24 j 21:50	9°♄39'02	-1°-23'-9	conjunction	-2698 Jun 12 j 11:51	27°♄27'09	0°-50'00
minimum elong	-2706 May 24 j 21:50	9°♄39'02	1°23'07	minimum elong	-2698 Jun 12 j 11:51	27°♄27'09	0°49'57
max. Earth dist.	-2706 May 24 j 15:48	9°♄38'29	30.95976 AU	max. Earth dist.	-2698 Jun 11 j 22:44	27°♄25'56	31.01950 AU
retrograde	-2706 Sep 06 j 22:52	12°♄09'57		retrograde	-2698 Sep 24 j 13:38	29°♄56'41	
opposition	-2706 Nov 23 j 09:33	10°♄46'18	-1°-26'-54	opposition	-2698 Dec 10 j 19:12	28°♄33'31	0°-51'-3
min. Earth dist.	-2706 Nov 23 j 15:20	10°♄45'53	28.96326 AU	min. Earth dist.	-2698 Dec 11 j 06:55	28°♄32'41	29.02532 AU
direct	-2705 Feb 10 j 06:31	9°♄21'19		direct	-2697 Feb 28 j 05:29	27°♄08'15	
conjunction	-2705 May 27 j 11:53	11°♄53'08	-1°-19'-22	conjunction	-2697 Jun 15 j 01:25	29°♄40'20	0°-45'-28
minimum elong	-2705 May 27 j 11:53	11°♄53'08	1°19'21	minimum elong	-2697 Jun 15 j 01:26	29°♄40'20	0°45'25
max. Earth dist.	-2705 May 27 j 03:37	11°♄52'22	30.96544 AU	max. Earth dist.	-2697 Jun 14 j 12:09	29°♄39'07	31.03048 AU
retrograde	-2705 Sep 09 j 11:30	14°♄23'52		retrograde	-2697 Jun 23 j 21:32	0°♂	
opposition	-2705 Nov 25 j 19:51	13°♄00'15	-1°-22'-47	opposition	-2697 Sep 27 j 01:00	2°♂09'43	
min. Earth dist.	-2705 Nov 26 j 02:39	12°♄59'46	28.96873 AU	opposition	-2697 Dec 13 j 05:28	0°♂46'39	0°-46'-10
direct	-2704 Feb 12 j 18:11	11°♄35'12		min. Earth dist.	-2697 Dec 13 j 17:44	0°♂45'48	29.03597 AU
conjunction	-2704 May 29 j 02:03	14°♄07'04	-1°-15'-28	direct	-2696 Jan 11 j 10:28	30°♂	
minimum elong	-2704 May 29 j 02:03	14°♄07'04	1°15'25	direct	-2696 Mar 01 j 18:49	29°♄21'25	
max. Earth dist.	-2704 May 28 j 17:55	14°♄06'18	30.97081 AU	direct	-2696 Apr 20 j 03:37	0°♂	
retrograde	-2704 Jun 22 j 07:33	15°♄		conjunction	-2696 Jun 16 j 14:53	1°♂53'32	0°-40'-51
opposition	-2704 Sep 10 j 21:27	16°♄37'35		minimum elong	-2696 Jun 16 j 14:53	1°♂53'32	0°40'47
min. Earth dist.	-2704 Nov 27 j 14:05	15°♄13'26	28.97403 AU	max. Earth dist.	-2696 Jun 15 j 23:31	1°♂52'07	31.04082 AU
direct	-2703 Feb 14 j 06:24	13°♄48'54		retrograde	-2696 Sep 28 j 13:47	4°♂22'46	
conjunction	-2703 May 31 j 15:53	16°♄20'46	-1°-11'-28	opposition	-2696 Dec 14 j 15:48	2°♂59'47	0°-41'-12
minimum elong	-2703 May 31 j 15:54	16°♄20'46	1°11'26	min. Earth dist.	-2696 Dec 15 j 04:58	2°♂58'51	29.04597 AU
max. Earth dist.	-2703 May 31 j 05:52	16°♄19'50	30.97641 AU	direct	-2695 Mar 04 j 07:06	1°♂34'32	
retrograde	-2703 Sep 13 j 08:21	18°♄51'06		conjunction	-2695 Jun 19 j 04:26	4°♂06'41	0°-36'-11
opposition	-2703 Nov 29 j 16:16	17°♄27'34	-1°-14'-14	minimum elong	-2695 Jun 19 j 04:26	4°♂06'41	0°36'09
min. Earth dist.	-2703 Nov 30 j 00:20	17°♄26'59	28.97994 AU	max. Earth dist.	-2695 Jun 18 j 13:09	4°♂05'16	31.05029 AU
direct	-2702 Feb 16 j 18:04	16°♄02'23		retrograde	-2695 Sep 30 j 23:38	6°♂35'45	
conjunction	-2702 Jun 03 j 05:34	18°♄34'16	-1°-7'-22	opposition	-2695 Dec 17 j 02:16	5°♂12'51	0°-36'-11
minimum elong	-2702 Jun 03 j 05:34	18°♄34'16	1°07'19	min. Earth dist.	-2695 Dec 17 j 16:44	5°♂11'50	29.05486 AU
max. Earth dist.	-2702 Jun 02 j 19:48	18°♄33'22	30.98268 AU	direct	-2694 Mar 06 j 20:01	3°♂47'35	
conjunction	-2702 Jun 03 j 05:34	18°♄34'16	-1°-7'-22	conjunction	-2694 Jun 21 j 17:34	6°♂19'44	0°-31'-29
minimum elong	-2702 Jun 03 j 05:34	18°♄34'16	1°07'19	minimum elong	-2694 Jun 21 j 17:34	6°♂19'44	0°31'25
max. Earth dist.	-2702 Jun 02 j 19:48	18°♄33'22	30.98268 AU	max. Earth dist.	-2694 Jun 21 j 00:14	6°♂18'07	31.05874 AU

Attention, astronomical year style is used: The year -2694 in astronomical counting style is the year 2695 BCE in historical counting style.

retrograde	-2694 Oct 03 j 10:53	8°II48'38		min. Earth dist.	-2686 Jan 04 j 07:07	22°II50'39	29.11856 AU
opposition	-2694 Dec 19 j 12:35	7°II25'47	0°-31'-8	direct	-2686 Mar 24 j 20:51	21°II26'30	
min. Earth dist.	-2694 Dec 20 j 03:17	7°II24'45	29.06280 AU				
direct	-2693 Mar 09 j 08:05	6°II00'29		conjunction	-2686 Jul 09 j 23:39	23°II58'39	0°07'11
				minimum elong	-2686 Jul 09 j 23:39	23°II58'39	0°07'16
conjunction	-2693 Jun 24 j 06:57	8°II32'38	0°-26'-43	behind sun begin	-2686 Jul 09 j 17:39	23°II58'07	
minimum elong	-2693 Jun 24 j 06:57	8°II32'38	0°26'41	behind sun end	-2686 Jul 10 j 05:40	23°II59'11	
max. Earth dist.	-2693 Jun 23 j 13:35	8°II31'02	31.06617 AU	max. Earth dist.	-2686 Jul 09 j 03:14	23°II56'46	31.12398 AU
retrograde	-2693 Oct 05 j 19:47	11°II01'22		retrograde	-2686 Oct 20 j 21:51	26°II26'26	
opposition	-2693 Dec 21 j 22:54	9°II38'34	0°-26'-2	opposition	-2685 Jan 05 j 23:21	25°II04'02	0°10'10
min. Earth dist.	-2693 Dec 22 j 15:19	9°II37'25	29.06983 AU	min. Earth dist.	-2685 Jan 06 j 18:30	25°II02'42	29.12988 AU
direct	-2692 Mar 10 j 19:42	8°II13'13		direct	-2685 Mar 27 j 09:44	23°II38'40	
conjunction	-2692 Jun 25 j 20:02	10°II45'22	0°-21'-56	conjunction	-2685 Jul 12 j 11:56	26°II10'50	0°12'01
minimum elong	-2692 Jun 25 j 20:02	10°II45'22	0°21'53	minimum elong	-2685 Jul 12 j 11:56	26°II10'50	0°12'05
max. Earth dist.	-2692 Jun 25 j 01:06	10°II43'37	31.07302 AU	behind sun begin	-2685 Jul 12 j 07:32	26°II10'26	
retrograde	-2692 Oct 07 j 07:00	13°II13'55		behind sun end	-2685 Jul 12 j 16:20	26°II11'13	
opposition	-2692 Dec 23 j 09:11	11°II51'10	0°-20'-54	max. Earth dist.	-2685 Jul 11 j 14:01	26°II08'48	31.13547 AU
min. Earth dist.	-2692 Dec 24 j 01:18	11°II50'02	29.07645 AU	retrograde	-2685 Oct 23 j 09:19	28°II38'31	
direct	-2691 Mar 13 j 07:26	10°II25'46		opposition	-2684 Jan 08 j 09:41	27°II16'14	0°15'20
				min. Earth dist.	-2684 Jan 09 j 04:41	27°II14'54	29.14137 AU
conjunction	-2691 Jun 28 j 08:54	12°II57'53	0°-17'-8	direct	-2684 Mar 28 j 21:29	25°II50'53	
minimum elong	-2691 Jun 28 j 08:54	12°II57'53	0°17'05	max. Earth dist.	-2684 Jul 13 j 02:52	28°II21'06	31.14666 AU
max. Earth dist.	-2691 Jun 27 j 13:43	12°II56'07	31.07952 AU				
retrograde	-2691 Oct 09 j 15:46	15°II26'18		conjunction	-2684 Jul 14 j 00:22	28°II23'05	0°16'50
opposition	-2691 Dec 25 j 19:36	14°II03'34	0°-15'-45	minimum elong	-2684 Jul 14 j 00:22	28°II23'05	0°16'55
min. Earth dist.	-2691 Dec 26 j 13:15	14°II02'19	29.08311 AU		-2684 Aug 30 j 03:36	0°☾	
direct	-2690 Mar 15 j 18:49	12°II38'08		retrograde	-2684 Oct 24 j 18:51	0°☾50'40	
					-2684 Dec 21 j 11:46	30°R II	
conjunction	-2690 Jun 30 j 21:39	15°II10'14	0°-12'-19	opposition	-2683 Jan 09 j 20:28	29°II28'29	0°20'29
minimum elong	-2690 Jun 30 j 21:39	15°II10'14	0°12'15	min. Earth dist.	-2683 Jan 10 j 16:56	29°II27'03	29.15226 AU
behind sun begin	-2690 Jun 30 j 17:21	15°II09'51		direct	-2683 Mar 31 j 09:07	28°II03'11	
behind sun end	-2690 Jul 01 j 01:58	15°II10'37			-2683 Jun 30 j 12:49	0°☾	
max. Earth dist.	-2690 Jun 30 j 02:02	15°II08'25	31.08645 AU				
retrograde	-2690 Oct 12 j 02:17	17°II38'29		conjunction	-2683 Jul 16 j 12:26	0°☾35'22	0°21'38
opposition	-2690 Dec 28 j 05:44	16°II15'47	0°-10'-34	minimum elong	-2683 Jul 16 j 12:25	0°☾35'22	0°21'42
min. Earth dist.	-2690 Dec 28 j 23:02	16°II14'34	29.09030 AU	max. Earth dist.	-2683 Jul 15 j 13:36	0°☾33'15	31.15710 AU
direct	-2689 Mar 18 j 08:14	14°II50'19		retrograde	-2683 Oct 27 j 06:08	3°☾02'52	
				opposition	-2682 Jan 12 j 07:06	1°☾40'45	0°25'36
conjunction	-2689 Jul 03 j 10:19	17°II22'25	0°-7'-29	min. Earth dist.	-2682 Jan 13 j 03:08	1°☾39'21	29.16217 AU
minimum elong	-2689 Jul 03 j 10:19	17°II22'25	0°07'26	direct	-2682 Apr 02 j 20:51	0°☾15'28	
behind sun begin	-2689 Jul 03 j 04:20	17°II21'53		max. Earth dist.	-2682 Jul 18 j 01:32	2°☾45'29	31.16630 AU
behind sun end	-2689 Jul 03 j 16:18	17°II22'57					
max. Earth dist.	-2689 Jul 02 j 13:55	17°II20'32	31.09403 AU	conjunction	-2682 Jul 19 j 00:40	2°☾47'38	0°26'24
retrograde	-2689 Oct 14 j 12:57	19°II50'32		minimum elong	-2682 Jul 19 j 00:40	2°☾47'38	0°26'28
opposition	-2689 Dec 30 j 16:07	18°II27'53	0°-5'-23	retrograde	-2682 Oct 29 j 14:24	5°☾15'02	
min. Earth dist.	-2689 Dec 31 j 10:18	18°II26'36	29.09852 AU	opposition	-2681 Jan 14 j 17:47	3°☾52'57	0°30'40
direct	-2688 Mar 19 j 19:20	17°II02'24		min. Earth dist.	-2681 Jan 15 j 15:29	3°☾51'27	29.17085 AU
				direct	-2681 Apr 05 j 08:04	2°☾27'40	
conjunction	-2688 Jul 04 j 22:53	19°II34'30	0°-2'-38				
minimum elong	-2688 Jul 04 j 22:54	19°II34'30	0°02'34	conjunction	-2681 Jul 21 j 12:50	4°☾59'49	0°31'07
behind sun begin	-2688 Jul 04 j 16:21	19°II33'55		minimum elong	-2681 Jul 21 j 12:50	4°☾59'49	0°31'11
behind sun end	-2688 Jul 05 j 05:27	19°II35'05		max. Earth dist.	-2681 Jul 20 j 13:02	4°☾57'36	31.17436 AU
max. Earth dist.	-2688 Jul 04 j 02:56	19°II32'39	31.10283 AU	retrograde	-2681 Nov 01 j 00:18	7°☾27'05	
retrograde	-2688 Oct 15 j 23:30	22°II02'29		opposition	-2680 Jan 17 j 04:31	6°☾05'03	0°35'42
opposition	-2687 Jan 01 j 02:28	20°II39'54	0°00'-12	min. Earth dist.	-2680 Jan 18 j 02:02	6°☾03'33	29.17821 AU
min. Earth dist.	-2687 Jan 01 j 20:35	20°II38'38	29.10786 AU	direct	-2680 Apr 06 j 20:51	4°☾39'45	
asc. node	-2687 Jan 16 j 05:11	20°II14'53		max. Earth dist.	-2680 Jul 22 j 00:07	7°☾09'33	31.18110 AU
direct	-2687 Mar 22 j 08:35	19°II14'27					
				conjunction	-2680 Jul 23 j 00:47	7°☾11'50	0°35'48
conjunction	-2687 Jul 07 j 11:18	21°II46'33	0°02'20	minimum elong	-2680 Jul 23 j 00:47	7°☾11'50	0°35'53
minimum elong	-2687 Jul 07 j 11:17	21°II46'33	0°02'24	retrograde	-2680 Nov 02 j 10:37	9°☾39'00	
behind sun begin	-2687 Jul 07 j 04:44	21°II45'59		opposition	-2679 Jan 18 j 15:20	8°☾16'58	0°40'40
behind sun end	-2687 Jul 07 j 17:51	21°II47'08		min. Earth dist.	-2679 Jan 19 j 13:51	8°☾15'24	29.18462 AU
max. Earth dist.	-2687 Jul 06 j 14:03	21°II44'36	31.11286 AU	direct	-2679 Apr 09 j 07:23	6°☾51'38	
retrograde	-2687 Oct 18 j 12:15	24°II14'26					
opposition	-2686 Jan 03 j 12:51	22°II51'56	0°04'59	conjunction	-2679 Jul 25 j 12:40	9°☾23'40	0°40'25

Attention, astronomical year style is used: The year -2679 in astronomical counting style is the year 2680 BCE in historical counting style.

minimum elong	-2679 Jul 25 j 12:40	9° $\overline{23}$ '40	0°40'29	opposition	-2670 Feb 07 j 17:44	27° $\overline{58}$ '42	1°21'45
max. Earth dist.	-2679 Jul 24 j 12:20	9° $\overline{21}$ '24	31.18712 AU	min. Earth dist.	-2670 Feb 08 j 17:06	27° $\overline{57}$ '06	29.24975 AU
retrograde	-2679 Nov 04 j 20:28	11° $\overline{50}$ '42		direct	-2670 Apr 29 j 19:28	26° $\overline{33}$ '35	
opposition	-2678 Jan 21 j 02:06	10° $\overline{28}$ '40	0°45'34				
min. Earth dist.	-2678 Jan 22 j 00:43	10° $\overline{27}$ '06	29.19034 AU	conjunction	-2670 Aug 14 j 17:50	29° $\overline{05}$ '16	1°18'28
direct	-2678 Apr 11 j 21:16	9° $\overline{03}$ '19		minimum elong	-2670 Aug 14 j 17:50	29° $\overline{05}$ '16	1°18'32
max. Earth dist.	-2678 Jul 26 j 22:40	11° $\overline{32}$ '54	31.19267 AU	max. Earth dist.	-2670 Aug 13 j 17:18	29° $\overline{02}$ '59	31.25215 AU
					-2670 Sep 08 j 17:08	0° $\overline{0}$	
conjunction	-2678 Jul 28 j 00:12	11° $\overline{35}$ '16	0°44'58	retrograde	-2670 Nov 24 j 16:18	1° $\overline{31}$ '49	
minimum elong	-2678 Jul 28 j 00:12	11° $\overline{35}$ '16	0°45'03	opposition	-2669 Feb 10 j 05:02	0° $\overline{10}$ '08	1°25'48
retrograde	-2678 Nov 07 j 08:21	14° $\overline{02}$ '11		min. Earth dist.	-2669 Feb 11 j 04:28	0° $\overline{10}$ '32	29.25591 AU
opposition	-2677 Jan 23 j 12:51	12° $\overline{40}$ '09	0°50'24		-2669 Feb 16 j 08:56	30° \overline{R} $\overline{28}$	
min. Earth dist.	-2677 Jan 24 j 11:33	12° $\overline{38}$ '35	29.19599 AU	direct	-2669 May 02 j 08:56	28° $\overline{45}$ '04	
direct	-2677 Apr 14 j 09:41	11° $\overline{14}$ '46			-2669 Jul 12 j 07:12	0° $\overline{0}$	
max. Earth dist.	-2677 Jul 29 j 11:16	13° $\overline{44}$ '23	31.19833 AU	max. Earth dist.	-2669 Aug 16 j 02:57	1° $\overline{14}$ '18	31.25755 AU
conjunction	-2677 Jul 30 j 11:49	13° $\overline{46}$ '39	0°49'27	conjunction	-2669 Aug 17 j 04:43	1° $\overline{16}$ '42	1°22'12
minimum elong	-2677 Jul 30 j 11:48	13° $\overline{46}$ '39	0°49'32	minimum elong	-2669 Aug 17 j 04:42	1° $\overline{16}$ '42	1°22'16
retrograde	-2677 Nov 09 j 17:15	16° $\overline{13}$ '28		retrograde	-2669 Nov 27 j 04:36	3° $\overline{43}$ '14	
opposition	-2676 Jan 25 j 23:41	14° $\overline{51}$ '26	0°55'09	opposition	-2668 Feb 12 j 16:22	2° $\overline{21}$ '34	1°29'43
min. Earth dist.	-2676 Jan 26 j 22:58	14° $\overline{49}$ '49	29.20188 AU	min. Earth dist.	-2668 Feb 13 j 15:47	2° $\overline{19}$ '58	29.26075 AU
direct	-2676 Apr 15 j 22:52	13° $\overline{26}$ '02		direct	-2668 May 03 j 20:40	0° $\overline{56}$ '30	
conjunction	-2676 Jul 31 j 23:08	15° $\overline{57}$ '52	0°53'52	conjunction	-2668 Aug 18 j 15:39	3° $\overline{28}$ '06	1°25'49
minimum elong	-2676 Jul 31 j 23:08	15° $\overline{57}$ '52	0°53'56	minimum elong	-2668 Aug 18 j 15:39	3° $\overline{28}$ '06	1°25'53
max. Earth dist.	-2676 Jul 30 j 21:39	15° $\overline{55}$ '30	31.20462 AU	max. Earth dist.	-2668 Aug 17 j 14:49	3° $\overline{25}$ '47	31.26162 AU
retrograde	-2676 Nov 11 j 04:41	18° $\overline{24}$ '35		retrograde	-2668 Nov 28 j 13:48	5° $\overline{54}$ '36	
opposition	-2675 Jan 27 j 10:33	17° $\overline{02}$ '35	0°59'49	opposition	-2667 Feb 14 j 03:53	4° $\overline{32}$ '55	1°33'31
min. Earth dist.	-2675 Jan 28 j 08:56	17° $\overline{01}$ '02	29.20873 AU	min. Earth dist.	-2667 Feb 15 j 03:59	4° $\overline{31}$ '16	29.26417 AU
direct	-2675 Apr 18 j 11:10	15° $\overline{37}$ '11		direct	-2667 May 06 j 09:17	3° $\overline{07}$ '53	
max. Earth dist.	-2675 Aug 02 j 10:02	18° $\overline{06}$ '43	31.21185 AU	max. Earth dist.	-2667 Aug 20 j 00:19	5° $\overline{36}$ '58	31.26450 AU
conjunction	-2675 Aug 03 j 10:22	18° $\overline{08}$ '59	0°58'12	conjunction	-2667 Aug 21 j 02:09	5° $\overline{39}$ '23	1°29'18
minimum elong	-2675 Aug 03 j 10:22	18° $\overline{08}$ '59	0°58'16	minimum elong	-2667 Aug 21 j 02:08	5° $\overline{39}$ '23	1°29'22
retrograde	-2675 Nov 13 j 14:04	20° $\overline{35}$ '38		retrograde	-2667 Dec 01 j 01:32	8° $\overline{05}$ '51	
opposition	-2674 Jan 29 j 21:33	19° $\overline{13}$ '40	1°04'24	opposition	-2666 Feb 16 j 15:13	6° $\overline{44}$ '09	1°37'10
min. Earth dist.	-2674 Jan 30 j 20:44	19° $\overline{12}$ '04	29.21650 AU	min. Earth dist.	-2666 Feb 17 j 14:33	6° $\overline{42}$ '33	29.26662 AU
direct	-2674 Apr 20 j 23:24	17° $\overline{48}$ '19		direct	-2666 May 08 j 22:11	5° $\overline{19}$ '06	
				max. Earth dist.	-2666 Aug 22 j 12:00	7° $\overline{48}$ '12	31.26645 AU
conjunction	-2674 Aug 05 j 21:31	20° $\overline{20}$ '04	1°02'27				
minimum elong	-2674 Aug 05 j 21:31	20° $\overline{20}$ '04	1°02'31	conjunction	-2666 Aug 23 j 12:48	7° $\overline{50}$ '32	1°32'39
max. Earth dist.	-2674 Aug 04 j 20:35	20° $\overline{17}$ '45	31.22009 AU	minimum elong	-2666 Aug 23 j 12:48	7° $\overline{50}$ '32	1°32'43
retrograde	-2674 Nov 16 j 00:59	22° $\overline{46}$ '41		retrograde	-2666 Dec 03 j 11:18	10° $\overline{16}$ '56	
opposition	-2673 Feb 01 j 08:17	21° $\overline{24}$ '47	1°08'54	opposition	-2665 Feb 19 j 02:35	8° $\overline{55}$ '13	1°40'41
min. Earth dist.	-2673 Feb 02 j 06:27	21° $\overline{23}$ '15	29.22503 AU	min. Earth dist.	-2665 Feb 20 j 02:50	8° $\overline{53}$ '33	29.26839 AU
direct	-2673 Apr 23 j 11:24	19° $\overline{59}$ '29		direct	-2665 May 11 j 11:29	7° $\overline{30}$ '09	
max. Earth dist.	-2673 Aug 07 j 08:09	22° $\overline{28}$ '56	31.22873 AU				
				conjunction	-2665 Aug 25 j 23:10	10° $\overline{01}$ '29	1°35'52
conjunction	-2673 Aug 08 j 08:46	22° $\overline{31}$ '14	1°06'36	minimum elong	-2665 Aug 25 j 23:10	10° $\overline{01}$ '29	1°35'56
minimum elong	-2673 Aug 08 j 08:45	22° $\overline{31}$ '14	1°06'40	max. Earth dist.	-2665 Aug 24 j 22:01	9° $\overline{59}$ '08	31.26816 AU
retrograde	-2673 Nov 18 j 09:44	24° $\overline{57}$ '49		retrograde	-2665 Dec 05 j 21:49	12° $\overline{27}$ '51	
opposition	-2672 Feb 03 j 19:24	23° $\overline{35}$ '59	1°13'17	opposition	-2664 Feb 21 j 14:00	11° $\overline{06}$ '06	1°44'03
min. Earth dist.	-2672 Feb 04 j 18:39	23° $\overline{34}$ '23	29.23382 AU	min. Earth dist.	-2664 Feb 22 j 12:53	11° $\overline{04}$ '32	29.27017 AU
direct	-2672 Apr 24 j 22:03	22° $\overline{10}$ '45		direct	-2664 May 13 j 00:36	9° $\overline{41}$ '01	
				max. Earth dist.	-2664 Aug 26 j 08:59	12° $\overline{09}$ '58	31.27004 AU
conjunction	-2672 Aug 09 j 19:46	24° $\overline{42}$ '30	1°10'40				
minimum elong	-2672 Aug 09 j 19:46	24° $\overline{42}$ '30	1°10'44	conjunction	-2664 Aug 27 j 09:23	12° $\overline{12}$ '15	1°38'57
max. Earth dist.	-2672 Aug 08 j 19:13	24° $\overline{40}$ '12	31.23738 AU	minimum elong	-2664 Aug 27 j 09:23	12° $\overline{12}$ '15	1°39'00
retrograde	-2672 Nov 19 j 19:35	27° $\overline{09}$ '04		retrograde	-2664 Dec 07 j 05:58	14° $\overline{38}$ '36	
opposition	-2671 Feb 05 j 06:32	25° $\overline{47}$ '18	1°17'34	opposition	-2663 Feb 23 j 01:38	13° $\overline{16}$ '49	1°47'16
min. Earth dist.	-2671 Feb 06 j 05:12	25° $\overline{45}$ '44	29.24216 AU	min. Earth dist.	-2663 Feb 24 j 00:59	13° $\overline{15}$ '13	29.27256 AU
direct	-2671 Apr 27 j 09:58	24° $\overline{22}$ '08		direct	-2663 May 15 j 11:48	11° $\overline{51}$ '45	
max. Earth dist.	-2671 Aug 11 j 05:45	26° $\overline{51}$ '31	31.24525 AU				
				conjunction	-2663 Aug 29 j 19:32	14° $\overline{22}$ '53	1°41'53
conjunction	-2671 Aug 12 j 06:49	26° $\overline{53}$ '51	1°14'37	minimum elong	-2663 Aug 29 j 19:32	14° $\overline{22}$ '53	1°41'57
minimum elong	-2671 Aug 12 j 06:49	26° $\overline{53}$ '51	1°14'41	max. Earth dist.	-2663 Aug 28 j 19:52	14° $\overline{20}$ '40	31.27287 AU
retrograde	-2671 Nov 22 j 06:20	29° $\overline{20}$ '25			-2663 Sep 15 j 11:48	15° $\overline{0}$	

Attention, astronomical year style is used: The year -2663 in astronomical counting style is the year 2664 BCE in historical counting style.

retrograde	-2663 Dec 09 j 15:04	16°049'13		conjunction	-2655 Sep 16 j 03:03	1°048'30	1°59'48
opposition	-2662 Feb 25 j 13:02	15°027'26	1°50'20	minimum elong	-2655 Sep 16 j 03:03	1°048'30	1°59'50
min. Earth dist.	-2662 Feb 26 j 11:06	15°025'55	29.27586 AU	retrograde	-2655 Dec 27 j 03:18	4°015'10	
	-2662 Mar 14 j 13:32	15°00		opposition	-2654 Mar 15 j 11:54	2°053'20	2°08'47
direct	-2662 May 17 j 23:58	14°002'24		min. Earth dist.	-2654 Mar 16 j 08:06	2°051'58	29.30078 AU
	-2662 Jul 18 j 08:13	15°00		direct	-2654 Jun 04 j 21:40	1°028'44	
max. Earth dist.	-2662 Aug 31 j 06:02	16°031'15	31.27662 AU				
				conjunction	-2654 Sep 18 j 12:48	3°059'12	2°01'18
conjunction	-2662 Sep 01 j 05:37	16°033'27	1°44'41	minimum elong	-2654 Sep 18 j 12:48	3°059'12	2°01'20
minimum elong	-2662 Sep 01 j 05:37	16°033'27	1°44'44	max. Earth dist.	-2654 Sep 17 j 16:45	3°057'19	31.29873 AU
retrograde	-2662 Dec 12 j 01:30	18°059'49		retrograde	-2654 Dec 29 j 12:42	6°025'53	
opposition	-2661 Feb 28 j 00:37	17°038'01	1°53'14	opposition	-2653 Mar 17 j 23:58	5°004'01	2°10'18
min. Earth dist.	-2661 Feb 28 j 22:38	17°036'31	29.28017 AU	min. Earth dist.	-2653 Mar 18 j 19:02	5°002'43	29.29948 AU
direct	-2661 May 20 j 09:37	16°013'02		direct	-2653 Jun 07 j 10:38	3°039'25	
conjunction	-2661 Sep 03 j 15:41	18°044'02	1°47'19	conjunction	-2653 Sep 20 j 22:16	6°009'46	2°02'38
minimum elong	-2661 Sep 03 j 15:40	18°044'01	1°47'22	minimum elong	-2653 Sep 20 j 22:16	6°009'46	2°02'40
max. Earth dist.	-2661 Sep 02 j 17:29	18°041'57	31.28123 AU	max. Earth dist.	-2653 Sep 20 j 02:16	6°007'53	31.29712 AU
retrograde	-2661 Dec 14 j 10:40	21°010'25		retrograde	-2653 Dec 31 j 23:09	8°036'31	
opposition	-2660 Mar 01 j 12:17	19°048'38	1°55'58	opposition	-2652 Mar 19 j 12:08	7°014'35	2°11'37
min. Earth dist.	-2660 Mar 02 j 09:41	19°047'11	29.28494 AU	min. Earth dist.	-2652 Mar 20 j 07:02	7°013'18	29.29789 AU
direct	-2660 May 21 j 22:22	18°023'44		direct	-2652 Jun 08 j 20:57	5°050'00	
max. Earth dist.	-2660 Sep 04 j 02:53	20°052'31	31.28615 AU				
				conjunction	-2652 Sep 22 j 07:46	8°020'14	2°03'47
conjunction	-2660 Sep 05 j 01:36	20°054'39	1°49'48	minimum elong	-2652 Sep 22 j 07:46	8°020'14	2°03'48
minimum elong	-2660 Sep 05 j 01:36	20°054'39	1°49'51	max. Earth dist.	-2652 Sep 21 j 13:27	8°018'31	31.29557 AU
retrograde	-2660 Dec 15 j 22:39	23°021'05		retrograde	-2651 Jan 02 j 08:01	10°047'02	
opposition	-2659 Mar 04 j 00:02	21°059'19	1°58'32	opposition	-2651 Mar 22 j 00:21	9°025'03	2°12'45
min. Earth dist.	-2659 Mar 04 j 20:47	21°057'55	29.28996 AU	min. Earth dist.	-2651 Mar 22 j 18:17	9°023'50	29.29651 AU
direct	-2659 May 24 j 08:22	20°034'29		direct	-2651 Jun 11 j 09:36	8°000'30	
conjunction	-2659 Sep 07 j 11:32	23°005'21	1°52'08	conjunction	-2651 Sep 24 j 16:58	10°030'38	2°04'45
minimum elong	-2659 Sep 07 j 11:32	23°005'21	1°52'11	minimum elong	-2651 Sep 24 j 16:58	10°030'38	2°04'46
max. Earth dist.	-2659 Sep 06 j 14:18	23°003'22	31.29089 AU	max. Earth dist.	-2651 Sep 23 j 22:30	10°028'53	31.29454 AU
retrograde	-2659 Dec 18 j 08:11	25°031'51		retrograde	-2650 Jan 04 j 19:42	12°057'30	
opposition	-2658 Mar 06 j 11:56	24°010'05	2°00'56	opposition	-2650 Mar 24 j 12:29	11°035'28	2°13'42
min. Earth dist.	-2658 Mar 07 j 09:04	24°008'39	29.29438 AU	min. Earth dist.	-2650 Mar 25 j 05:14	11°034'20	29.29599 AU
direct	-2658 May 26 j 20:06	22°045'19		direct	-2650 Jun 13 j 19:06	10°010'58	
				max. Earth dist.	-2650 Sep 26 j 09:50	12°039'27	31.29440 AU
conjunction	-2658 Sep 09 j 21:25	25°016'07	1°54'18	conjunction	-2650 Sep 27 j 02:23	12°041'00	2°05'33
minimum elong	-2658 Sep 09 j 21:25	25°016'07	1°54'20	minimum elong	-2650 Sep 27 j 02:23	12°041'00	2°05'33
max. Earth dist.	-2658 Sep 08 j 23:29	25°014'03	31.29488 AU	retrograde	-2649 Jan 07 j 05:07	15°007'58	
retrograde	-2658 Dec 20 j 20:27	27°042'39		opposition	-2649 Mar 27 j 00:42	13°045'55	2°14'27
opposition	-2657 Mar 08 j 23:40	26°020'54	2°03'10	min. Earth dist.	-2649 Mar 27 j 17:11	13°044'48	29.29627 AU
min. Earth dist.	-2657 Mar 09 j 19:47	26°019'32	29.29790 AU	direct	-2649 Jun 16 j 06:11	12°021'29	
direct	-2657 May 29 j 08:24	24°056'11					
max. Earth dist.	-2657 Sep 11 j 10:36	27°024'58	31.29770 AU				
				conjunction	-2649 Sep 29 j 11:37	14°051'27	2°06'10
conjunction	-2657 Sep 12 j 07:28	27°026'55	1°56'18	minimum elong	-2649 Sep 29 j 11:37	14°051'27	2°06'11
minimum elong	-2657 Sep 12 j 07:27	27°026'55	1°56'20	max. Earth dist.	-2649 Sep 28 j 19:07	14°049'54	31.29524 AU
retrograde	-2657 Dec 23 j 07:04	29°053'30		retrograde	-2648 Jan 09 j 17:50	17°018'30	
opposition	-2656 Mar 10 j 11:50	28°031'44	2°05'13	opposition	-2648 Mar 28 j 13:00	15°056'27	2°15'01
min. Earth dist.	-2656 Mar 11 j 08:41	28°030'19	29.30015 AU	min. Earth dist.	-2648 Mar 29 j 03:43	15°055'27	29.29746 AU
direct	-2656 May 30 j 21:11	27°007'05		direct	-2648 Jun 17 j 17:58	14°032'06	
conjunction	-2656 Sep 13 j 17:12	29°037'44	1°58'08	conjunction	-2648 Sep 30 j 20:50	17°002'01	2°06'36
minimum elong	-2656 Sep 13 j 17:12	29°037'44	1°58'10	minimum elong	-2648 Sep 30 j 20:50	17°002'01	2°06'36
max. Earth dist.	-2656 Sep 12 j 20:07	29°035'45	31.29931 AU	max. Earth dist.	-2648 Sep 30 j 06:00	17°000'37	31.29662 AU
	-2656 Sep 23 j 14:59	0°00		retrograde	-2647 Jan 11 j 05:18	19°029'12	
retrograde	-2656 Dec 24 j 18:06	2°004'21		opposition	-2647 Mar 31 j 01:31	18°007'07	2°15'23
opposition	-2655 Mar 12 j 23:52	0°042'34	2°07'05	min. Earth dist.	-2647 Mar 31 j 16:26	18°006'07	29.29897 AU
min. Earth dist.	-2655 Mar 13 j 19:22	0°041'15	29.30106 AU	direct	-2647 Jun 20 j 05:52	16°042'53	
	-2655 Apr 09 j 08:25	30°00					
direct	-2655 Jun 02 j 10:10	29°017'56		conjunction	-2647 Oct 03 j 06:05	19°012'43	2°06'51
	-2655 Jul 24 j 06:15	0°00		minimum elong	-2647 Oct 03 j 06:05	19°012'43	2°06'52
max. Earth dist.	-2655 Sep 15 j 06:22	1°046'33	31.29950 AU	max. Earth dist.	-2647 Oct 02 j 15:37	19°011'21	31.29818 AU
				retrograde	-2646 Jan 13 j 16:46	21°040'01	

Attention, astronomical year style is used: The year -2646 in astronomical counting style is the year 2647 BCE in historical counting style.

opposition	-2646 Apr 02 j 13:46	20° \mathring{M} 17'57	2°15'33	max. Earth dist.	-2639 Oct 19 j 23:16	6° \mathring{A} 38'59	31.27377 AU
min. Earth dist.	-2646 Apr 03 j 02:59	20° \mathring{M} 17'04	29.30030 AU	retrograde	-2638 Jan 31 j 06:01	9° \mathring{A} 07'54	
direct	-2646 Jun 22 j 17:56	18° \mathring{M} 53'48		opposition	-2638 Apr 20 j 19:33	7° \mathring{A} 45'19	2°09'59
				min. Earth dist.	-2638 Apr 21 j 04:23	7° \mathring{A} 44'44	29.27241 AU
conjunction	-2646 Oct 05 j 15:25	21° \mathring{M} 23'35	2°06'55	direct	-2638 Jul 10 j 15:17	6° \mathring{A} 21'27	
minimum elong	-2646 Oct 05 j 15:26	21° \mathring{M} 23'35	2°06'55				
max. Earth dist.	-2646 Oct 05 j 01:32	21° \mathring{M} 22'16	31.29915 AU	conjunction	-2638 Oct 22 j 17:01	8° \mathring{A} 50'21	2°00'59
retrograde	-2645 Jan 16 j 03:11	23° \mathring{M} 50'59		minimum elong	-2638 Oct 22 j 17:02	8° \mathring{A} 50'21	2°00'58
opposition	-2645 Apr 05 j 02:26	22° \mathring{M} 28'55	2°15'32	max. Earth dist.	-2638 Oct 22 j 09:06	8° \mathring{A} 49'36	31.26848 AU
min. Earth dist.	-2645 Apr 05 j 16:03	22° \mathring{M} 28'00	29.30092 AU	retrograde	-2637 Feb 02 j 17:36	11° \mathring{A} 18'32	
direct	-2645 Jun 25 j 05:41	21° \mathring{M} 04'51		opposition	-2637 Apr 23 j 08:16	9° \mathring{A} 55'54	2°08'27
max. Earth dist.	-2645 Oct 07 j 11:50	23° \mathring{M} 33'20	31.29926 AU	min. Earth dist.	-2637 Apr 23 j 14:51	9° \mathring{A} 55'27	29.26744 AU
				direct	-2637 Jul 13 j 03:13	8° \mathring{A} 32'04	
conjunction	-2645 Oct 08 j 00:42	23° \mathring{M} 34'33	2°06'48				
minimum elong	-2645 Oct 08 j 00:42	23° \mathring{M} 34'33	2°06'48	conjunction	-2637 Oct 25 j 01:57	11° \mathring{A} 00'53	1°59'27
retrograde	-2644 Jan 18 j 13:45	26° \mathring{M} 02'04		minimum elong	-2637 Oct 25 j 01:57	11° \mathring{A} 00'53	1°59'26
opposition	-2644 Apr 06 j 15:06	24° \mathring{M} 39'58	2°15'19	max. Earth dist.	-2637 Oct 24 j 18:58	11° \mathring{A} 00'14	31.26392 AU
min. Earth dist.	-2644 Apr 07 j 03:27	24° \mathring{M} 39'08	29.30032 AU	retrograde	-2636 Feb 05 j 04:53	13° \mathring{A} 29'14	
direct	-2644 Jun 26 j 19:15	23° \mathring{M} 15'58		opposition	-2636 Apr 24 j 21:15	12° \mathring{A} 06'32	2°06'43
				min. Earth dist.	-2636 Apr 25 j 03:37	12° \mathring{A} 06'06	29.26332 AU
conjunction	-2644 Oct 09 j 10:01	25° \mathring{M} 45'35	2°06'30	direct	-2636 Jul 14 j 14:49	10° \mathring{A} 42'47	
minimum elong	-2644 Oct 09 j 10:02	25° \mathring{M} 45'35	2°06'30				
max. Earth dist.	-2644 Oct 08 j 21:00	25° \mathring{M} 44'21	31.29799 AU	conjunction	-2636 Oct 26 j 11:01	13° \mathring{A} 11'31	1°57'44
retrograde	-2643 Jan 20 j 00:53	28° \mathring{M} 13'13		minimum elong	-2636 Oct 26 j 11:01	13° \mathring{A} 11'31	1°57'43
opposition	-2643 Apr 09 j 03:51	26° \mathring{M} 51'04	2°14'54	max. Earth dist.	-2636 Oct 26 j 05:41	13° \mathring{A} 11'01	31.26024 AU
min. Earth dist.	-2643 Apr 09 j 16:07	26° \mathring{M} 50'14	29.29843 AU	retrograde	-2635 Feb 06 j 16:03	15° \mathring{A} 40'01	
direct	-2643 Jun 29 j 05:50	25° \mathring{M} 27'07		opposition	-2635 Apr 27 j 10:00	14° \mathring{A} 17'18	2°04'48
				min. Earth dist.	-2635 Apr 27 j 14:36	14° \mathring{A} 16'59	29.25977 AU
conjunction	-2643 Oct 11 j 19:24	27° \mathring{M} 56'37	2°06'01	direct	-2635 Jul 17 j 03:52	12° \mathring{A} 53'38	
minimum elong	-2643 Oct 11 j 19:24	27° \mathring{M} 56'37	2°06'01				
max. Earth dist.	-2643 Oct 11 j 07:48	27° \mathring{M} 55'31	31.29532 AU	conjunction	-2635 Oct 28 j 19:57	15° \mathring{A} 22'19	1°55'51
	-2643 Dec 15 j 04:18	0° \mathring{A}		minimum elong	-2635 Oct 28 j 19:58	15° \mathring{A} 22'19	1°55'50
retrograde	-2642 Jan 22 j 09:38	0° \mathring{A} 24'21		max. Earth dist.	-2635 Oct 28 j 14:50	15° \mathring{A} 21'50	31.25688 AU
	-2642 Mar 03 j 02:03	30° \mathring{R} \mathring{M}		retrograde	-2634 Feb 09 j 03:50	17° \mathring{A} 50'59	
opposition	-2642 Apr 11 j 16:35	29° \mathring{M} 02'09	2°14'18	opposition	-2634 Apr 29 j 22:57	16° \mathring{A} 28'14	2°02'42
min. Earth dist.	-2642 Apr 12 j 04:12	29° \mathring{M} 01'22	29.29486 AU	min. Earth dist.	-2634 Apr 30 j 03:06	16° \mathring{A} 27'57	29.25644 AU
direct	-2642 Jul 01 j 18:42	27° \mathring{M} 38'13		direct	-2634 Jul 19 j 14:07	15° \mathring{A} 04'40	
	-2642 Oct 10 j 20:07	0° \mathring{A}					
conjunction	-2642 Oct 14 j 04:36	0° \mathring{A} 07'36	2°05'22	conjunction	-2634 Oct 31 j 05:05	17° \mathring{A} 33'17	1°53'48
minimum elong	-2642 Oct 14 j 04:37	0° \mathring{A} 07'36	2°05'21	minimum elong	-2634 Oct 31 j 05:05	17° \mathring{A} 33'17	1°53'46
max. Earth dist.	-2642 Oct 13 j 16:27	0° \mathring{A} 06'27	31.29109 AU	max. Earth dist.	-2634 Oct 31 j 01:51	17° \mathring{A} 32'59	31.25344 AU
retrograde	-2641 Jan 24 j 21:07	2° \mathring{A} 35'25		retrograde	-2633 Feb 11 j 13:13	20° \mathring{A} 02'08	
opposition	-2641 Apr 14 j 05:15	1° \mathring{A} 13'08	2°13'30	opposition	-2633 May 02 j 11:55	18° \mathring{A} 39'22	2°00'25
min. Earth dist.	-2641 Apr 14 j 16:00	1° \mathring{A} 12'25	29.29001 AU	min. Earth dist.	-2633 May 02 j 15:06	18° \mathring{A} 39'09	29.25264 AU
	-2641 Jun 07 j 23:06	30° \mathring{R} \mathring{M}		direct	-2633 Jul 22 j 02:37	17° \mathring{A} 15'53	
direct	-2641 Jul 04 j 04:44	29° \mathring{M} 49'13					
	-2641 Jul 29 j 22:16	0° \mathring{A}		conjunction	-2633 Nov 02 j 14:09	19° \mathring{A} 44'28	1°51'35
conjunction	-2641 Oct 16 j 13:55	2° \mathring{A} 18'29	2°04'32	minimum elong	-2633 Nov 02 j 14:10	19° \mathring{A} 44'28	1°51'33
minimum elong	-2641 Oct 16 j 13:55	2° \mathring{A} 18'29	2°04'32	max. Earth dist.	-2633 Nov 02 j 10:39	19° \mathring{A} 44'08	31.24944 AU
max. Earth dist.	-2641 Oct 16 j 03:29	2° \mathring{A} 17'30	31.28570 AU	retrograde	-2632 Feb 14 j 01:37	22° \mathring{A} 13'29	
retrograde	-2640 Jan 27 j 06:45	4° \mathring{A} 46'23		opposition	-2632 May 04 j 01:01	20° \mathring{A} 50'42	1°57'57
opposition	-2640 Apr 15 j 18:09	3° \mathring{A} 24'00	2°12'31	min. Earth dist.	-2632 May 04 j 03:07	20° \mathring{A} 50'33	29.24823 AU
min. Earth dist.	-2640 Apr 16 j 04:45	3° \mathring{A} 23'17	29.28417 AU	direct	-2632 Jul 23 j 12:18	19° \mathring{A} 27'17	
direct	-2640 Jul 05 j 16:41	2° \mathring{A} 00'06					
				conjunction	-2632 Nov 03 j 23:24	21° \mathring{A} 55'48	1°49'12
conjunction	-2640 Oct 17 j 22:52	4° \mathring{A} 29'12	2°03'31	minimum elong	-2632 Nov 03 j 23:24	21° \mathring{A} 55'48	1°49'10
minimum elong	-2640 Oct 17 j 22:52	4° \mathring{A} 29'12	2°03'31	max. Earth dist.	-2632 Nov 03 j 21:35	21° \mathring{A} 55'38	31.24444 AU
max. Earth dist.	-2640 Oct 17 j 12:33	4° \mathring{A} 28'14	31.27976 AU	retrograde	-2631 Feb 15 j 12:01	24° \mathring{A} 25'00	
retrograde	-2639 Jan 28 j 19:00	6° \mathring{A} 57'12		opposition	-2631 May 06 j 14:13	23° \mathring{A} 02'10	1°55'19
opposition	-2639 Apr 18 j 06:52	5° \mathring{A} 34'43	2°11'21	min. Earth dist.	-2631 May 06 j 16:16	23° \mathring{A} 02'01	29.24253 AU
min. Earth dist.	-2639 Apr 18 j 15:43	5° \mathring{A} 34'07	29.27814 AU	direct	-2631 Jul 25 j 23:56	21° \mathring{A} 38'49	
direct	-2639 Jul 08 j 04:05	4° \mathring{A} 10'49					
				conjunction	-2631 Nov 06 j 08:40	24° \mathring{A} 07'15	1°46'39
conjunction	-2639 Oct 20 j 08:00	6° \mathring{A} 39'49	2°02'20	minimum elong	-2631 Nov 06 j 08:41	24° \mathring{A} 07'15	1°46'38
minimum elong	-2639 Oct 20 j 08:01	6° \mathring{A} 39'49	2°02'20	max. Earth dist.	-2631 Nov 06 j 06:43	24° \mathring{A} 07'04	31.23817 AU
				retrograde	-2630 Feb 18 j 00:47	26° \mathring{A} 36'36	
				opposition	-2630 May 09 j 03:09	25° \mathring{A} 13'43	1°52'32

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Attention, astronomical year style is used: The year -2630 in astronomical counting style is the year 2631 BCE in historical counting style.

min. Earth dist.	-2630 May 09 j 03:46	25° <u>♄</u> 13'40	29.23546 AU	min. Earth dist.	-2622 May 27 j 05:05	12° <u>♍</u> 45'10	29.16621 AU
direct	-2630 Jul 28 j 10:41	23° <u>♄</u> 50'24		direct	-2622 Aug 15 j 08:14	11° <u>♍</u> 21'35	
conjunction	-2630 Nov 08 j 18:03	26° <u>♄</u> 18'47	1°43'58	conjunction	-2622 Nov 25 j 19:46	13° <u>♍</u> 49'18	1°17'26
minimum elong	-2630 Nov 08 j 18:03	26° <u>♄</u> 18'47	1°43'56	minimum elong	-2622 Nov 25 j 19:46	13° <u>♍</u> 49'18	1°17'23
max. Earth dist.	-2630 Nov 08 j 17:10	26° <u>♄</u> 18'42	31.23034 AU	max. Earth dist.	-2622 Nov 26 j 02:43	13° <u>♍</u> 49'57	31.16267 AU
retrograde	-2629 Feb 20 j 12:29	28° <u>♄</u> 48'16			-2622 Dec 28 j 03:09	15° <u>♍</u>	
opposition	-2629 May 11 j 16:26	27° <u>♄</u> 25'17	1°49'34	retrograde	-2621 Mar 10 j 09:25	16° <u>♍</u> 19'55	
min. Earth dist.	-2629 May 11 j 17:22	27° <u>♄</u> 25'14	29.22691 AU		-2621 May 27 j 17:51	15° <u>♍</u>	
direct	-2629 Jul 30 j 21:13	26° <u>♄</u> 02'00		opposition	-2621 May 30 j 00:49	14° <u>♍</u> 56'17	1°20'40
				min. Earth dist.	-2621 May 29 j 16:23	14° <u>♍</u> 56'51	29.16021 AU
conjunction	-2629 Nov 11 j 03:14	28° <u>♄</u> 30'17	1°41'08	direct	-2621 Aug 17 j 18:22	13° <u>♍</u> 33'12	
minimum elong	-2629 Nov 11 j 03:14	28° <u>♄</u> 30'17	1°41'06		-2621 Oct 31 j 15:40	15° <u>♍</u>	
max. Earth dist.	-2629 Nov 11 j 03:00	28° <u>♄</u> 30'15	31.22132 AU	conjunction	-2621 Nov 28 j 05:07	16° <u>♍</u> 00'53	1°13'33
	-2629 Dec 23 j 09:56	0° <u>♍</u>		minimum elong	-2621 Nov 28 j 05:07	16° <u>♍</u> 00'53	1°13'30
retrograde	-2628 Feb 23 j 00:38	0° <u>♍</u> 59'54		max. Earth dist.	-2621 Nov 28 j 13:21	16° <u>♍</u> 01'40	31.15664 AU
	-2628 Apr 28 j 17:07	30° <u>♍</u>		retrograde	-2620 Mar 11 j 21:10	18° <u>♍</u> 31'42	
opposition	-2628 May 13 j 05:34	29° <u>♄</u> 36'49	1°46'28	opposition	-2620 May 31 j 14:06	17° <u>♍</u> 08'01	1°16'26
min. Earth dist.	-2628 May 13 j 04:36	29° <u>♄</u> 36'53	29.21726 AU	min. Earth dist.	-2620 May 31 j 05:51	17° <u>♍</u> 08'35	29.15406 AU
direct	-2628 Aug 01 j 09:08	28° <u>♄</u> 13'31		direct	-2620 Aug 19 j 04:11	15° <u>♍</u> 45'00	
	-2628 Oct 24 j 22:35	0° <u>♍</u>					
conjunction	-2628 Nov 12 j 12:27	0° <u>♍</u> 41'42	1°38'09	conjunction	-2620 Nov 29 j 14:44	18° <u>♍</u> 12'39	1°09'33
minimum elong	-2628 Nov 12 j 12:27	0° <u>♍</u> 41'42	1°38'07	minimum elong	-2620 Nov 29 j 14:45	18° <u>♍</u> 12'39	1°09'30
max. Earth dist.	-2628 Nov 12 j 12:45	0° <u>♍</u> 41'43	31.21134 AU	max. Earth dist.	-2620 Nov 29 j 23:47	18° <u>♍</u> 13'31	31.15035 AU
retrograde	-2627 Feb 24 j 12:50	3° <u>♍</u> 11'26		retrograde	-2619 Mar 14 j 10:12	20° <u>♍</u> 43'38	
opposition	-2627 May 15 j 18:39	1° <u>♍</u> 48'14	1°43'12	opposition	-2619 Jun 03 j 03:05	19° <u>♍</u> 19'55	1°12'06
min. Earth dist.	-2627 May 15 j 17:46	1° <u>♍</u> 48'17	29.20715 AU	min. Earth dist.	-2619 Jun 02 j 17:06	19° <u>♍</u> 20'36	29.14733 AU
direct	-2627 Aug 03 j 21:08	0° <u>♍</u> 24'56		direct	-2619 Aug 21 j 15:26	17° <u>♍</u> 56'57	
conjunction	-2627 Nov 14 j 21:41	2° <u>♍</u> 53'00	1°35'02	conjunction	-2619 Dec 02 j 00:25	20° <u>♍</u> 24'35	1°05'27
minimum elong	-2627 Nov 14 j 21:41	2° <u>♍</u> 53'00	1°34'59	minimum elong	-2619 Dec 02 j 00:25	20° <u>♍</u> 24'35	1°05'23
max. Earth dist.	-2627 Nov 14 j 23:40	2° <u>♍</u> 53'12	31.20129 AU	max. Earth dist.	-2619 Dec 02 j 09:35	20° <u>♍</u> 25'27	31.14312 AU
retrograde	-2626 Feb 27 j 00:51	5° <u>♍</u> 22'51		retrograde	-2618 Mar 16 j 23:31	22° <u>♍</u> 55'45	
opposition	-2626 May 18 j 07:38	3° <u>♍</u> 59'32	1°39'48	opposition	-2618 Jun 05 j 16:23	21° <u>♍</u> 31'58	1°07'40
min. Earth dist.	-2626 May 18 j 04:56	3° <u>♍</u> 59'43	29.19713 AU	min. Earth dist.	-2618 Jun 05 j 06:45	21° <u>♍</u> 32'38	29.13957 AU
direct	-2626 Aug 06 j 10:36	2° <u>♍</u> 36'15		direct	-2618 Aug 24 j 02:23	20° <u>♍</u> 09'03	
conjunction	-2626 Nov 17 j 06:42	5° <u>♍</u> 04'13	1°31'46	conjunction	-2618 Dec 04 j 10:10	22° <u>♍</u> 36'39	1°01'15
minimum elong	-2626 Nov 17 j 06:42	5° <u>♍</u> 04'13	1°31'43	minimum elong	-2618 Dec 04 j 10:11	22° <u>♍</u> 36'39	1°01'11
max. Earth dist.	-2626 Nov 17 j 08:58	5° <u>♍</u> 04'26	31.19161 AU	max. Earth dist.	-2618 Dec 04 j 20:44	22° <u>♍</u> 37'39	31.13479 AU
retrograde	-2625 Mar 01 j 12:18	7° <u>♍</u> 34'12		retrograde	-2617 Mar 19 j 12:28	25° <u>♍</u> 07'57	
opposition	-2625 May 20 j 20:43	6° <u>♍</u> 10'47	1°36'15	opposition	-2617 Jun 08 j 05:36	23° <u>♍</u> 44'08	1°03'08
min. Earth dist.	-2625 May 20 j 17:19	6° <u>♍</u> 11'01	29.18794 AU	min. Earth dist.	-2617 Jun 07 j 18:33	23° <u>♍</u> 44'52	29.13048 AU
direct	-2625 Aug 08 j 21:04	4° <u>♍</u> 47'30		direct	-2617 Aug 26 j 15:17	22° <u>♍</u> 21'13	
conjunction	-2625 Nov 19 j 15:59	7° <u>♍</u> 15'23	1°28'23	conjunction	-2617 Dec 06 j 19:57	24° <u>♍</u> 48'47	0°56'57
minimum elong	-2625 Nov 19 j 15:59	7° <u>♍</u> 15'24	1°28'20	minimum elong	-2617 Dec 06 j 19:57	24° <u>♍</u> 48'47	0°56'54
max. Earth dist.	-2625 Nov 19 j 20:27	7° <u>♍</u> 15'49	31.18297 AU	max. Earth dist.	-2617 Dec 07 j 06:10	24° <u>♍</u> 49'45	31.12519 AU
retrograde	-2624 Mar 02 j 22:06	9° <u>♍</u> 45'30		retrograde	-2616 Mar 21 j 01:14	27° <u>♍</u> 20'14	
opposition	-2624 May 22 j 09:46	8° <u>♍</u> 22'01	1°32'33	opposition	-2616 Jun 09 j 18:51	25° <u>♍</u> 56'19	0°58'30
min. Earth dist.	-2624 May 22 j 04:57	8° <u>♍</u> 22'21	29.17975 AU	min. Earth dist.	-2616 Jun 09 j 07:45	25° <u>♍</u> 57'04	29.12037 AU
direct	-2624 Aug 10 j 10:13	6° <u>♍</u> 58'46		direct	-2616 Aug 28 j 01:44	24° <u>♍</u> 33'25	
conjunction	-2624 Nov 21 j 01:05	9° <u>♍</u> 26'35	1°24'52	conjunction	-2616 Dec 08 j 05:51	27° <u>♍</u> 00'55	0°52'35
minimum elong	-2624 Nov 21 j 01:05	9° <u>♍</u> 26'36	1°24'48	minimum elong	-2616 Dec 08 j 05:51	27° <u>♍</u> 00'55	0°52'31
max. Earth dist.	-2624 Nov 21 j 05:40	9° <u>♍</u> 27'02	31.17543 AU	max. Earth dist.	-2616 Dec 08 j 17:47	27° <u>♍</u> 02'03	31.11464 AU
retrograde	-2623 Mar 05 j 10:45	11° <u>♍</u> 56'52		retrograde	-2615 Mar 23 j 12:18	29° <u>♍</u> 32'30	
opposition	-2623 May 24 j 22:47	10° <u>♍</u> 33'19	1°28'43	opposition	-2615 Jun 12 j 07:59	28° <u>♍</u> 08'29	0°53'47
min. Earth dist.	-2623 May 24 j 16:32	10° <u>♍</u> 33'44	29.17267 AU	min. Earth dist.	-2615 Jun 11 j 19:59	28° <u>♍</u> 09'18	29.10940 AU
direct	-2623 Aug 12 j 20:41	9° <u>♍</u> 10'07		direct	-2615 Aug 30 j 15:18	26° <u>♍</u> 45'35	
conjunction	-2623 Nov 23 j 10:26	11° <u>♍</u> 37'53	1°21'13	conjunction	-2615 Dec 10 j 15:36	29° <u>♍</u> 13'02	0°48'08
minimum elong	-2623 Nov 23 j 10:26	11° <u>♍</u> 37'53	1°21'10	minimum elong	-2615 Dec 10 j 15:36	29° <u>♍</u> 13'02	0°48'04
max. Earth dist.	-2623 Nov 23 j 16:59	11° <u>♍</u> 38'30	31.16873 AU	max. Earth dist.	-2615 Dec 11 j 03:17	29° <u>♍</u> 14'08	31.10363 AU
retrograde	-2622 Mar 07 j 20:56	14° <u>♍</u> 08'19			-2615 Dec 31 j 14:39	0° <u>♍</u>	
opposition	-2622 May 27 j 11:44	12° <u>♍</u> 44'43	1°24'45	retrograde	-2614 Mar 26 j 01:40	1° <u>♍</u> 44'45	

Attention, astronomical year style is used: The year -2614 in astronomical counting style is the year 2615 BCE in historical counting style.

opposition	-2614 Jun 14 j 20:57	0° 20 '38	0°48'59	behind sun end	-2607 Dec 28 j 05:45	16° 25 '30	
min. Earth dist.	-2614 Jun 14 j 07:55	0° 21 '31	29.09844 AU	max. Earth dist.	-2607 Dec 28 j 20:11	16° 25 '43	31.03992 AU
	-2614 Jun 27 j 15:53	30° 18 '		retrograde	-2606 Apr 13 j 06:25	19° 25 '39	
direct	-2614 Sep 02 j 02:23	28° 15 '57	43	min. Earth dist.	-2606 Jul 02 j 09:56	18° 20 '29	29.03638 AU
	-2614 Nov 03 j 05:39	0° 21 '		opposition	-2606 Jul 03 j 04:55	18° 20 '11	0°08'31
				direct	-2606 Sep 19 j 18:23	16° 25 '38	29
conjunction	-2614 Dec 13 j 01:30	1° 25 '07	0°43'37				
minimum elong	-2614 Dec 13 j 01:31	1° 25 '07	0°43'33	conjunction	-2606 Dec 30 j 11:20	19° 25 '05	0°05'39
max. Earth dist.	-2614 Dec 13 j 15:00	1° 26 '24	31.09282 AU	minimum elong	-2606 Dec 30 j 11:20	19° 25 '05	0°05'34
retrograde	-2613 Mar 28 j 11:56	3° 56 '58		behind sun begin	-2606 Dec 30 j 05:09	19° 25 '05	20
opposition	-2613 Jun 17 j 10:05	2° 32 '46	0°44'08	behind sun end	-2606 Dec 30 j 17:31	19° 25 '06	27
min. Earth dist.	-2613 Jun 16 j 20:34	2° 33 '42	29.08797 AU	max. Earth dist.	-2606 Dec 31 j 06:09	19° 25 '07	40 31.03222 AU
direct	-2613 Sep 04 j 14:20	1° 29 '09	52	retrograde	-2605 Apr 15 j 21:12	21° 23 '38	59
				opposition	-2605 Jul 05 j 17:59	20° 21 '42	0°03'18
conjunction	-2613 Dec 15 j 11:17	3° 37 '12	0°39'02	min. Earth dist.	-2605 Jul 04 j 22:30	20° 21 '54	29.02814 AU
minimum elong	-2613 Dec 15 j 11:17	3° 37 '13	0°38'58	direct	-2605 Sep 22 j 05:43	18° 25 '51	46
max. Earth dist.	-2613 Dec 16 j 01:19	3° 38 '32	31.08294 AU				
retrograde	-2612 Mar 30 j 00:08	6° 29 '13		conjunction	-2604 Jan 01 j 22:10	21° 21 '19	10 0°00'44
opposition	-2612 Jun 18 j 23:05	4° 24 '57	0°39'12	minimum elong	-2604 Jan 01 j 22:12	21° 21 '19	10 0°00'40
min. Earth dist.	-2612 Jun 18 j 07:47	4° 24 '59	29.07859 AU	behind sun begin	-2604 Jan 01 j 15:47	21° 21 '18	35
direct	-2612 Sep 06 j 00:48	3° 22 '03		behind sun end	-2604 Jan 02 j 04:37	21° 21 '19	44
				max. Earth dist.	-2604 Jan 02 j 18:07	21° 21 '21	02 31.02326 AU
conjunction	-2612 Dec 16 j 21:18	5° 24 '23	0°34'24	desc. node	-2604 Feb 23 j 17:16	23° 25 '07	17
minimum elong	-2612 Dec 16 j 21:19	5° 24 '23	0°34'20	retrograde	-2604 Apr 17 j 08:17	23° 25 '52	23
max. Earth dist.	-2612 Dec 17 j 12:32	5° 25 '04	31.07402 AU	min. Earth dist.	-2604 Jul 06 j 11:49	22° 22 '29	06 29.01852 AU
retrograde	-2611 Apr 01 j 11:36	8° 21 '32		opposition	-2604 Jul 07 j 07:04	22° 22 '27	47 0°-1'-54
opposition	-2611 Jun 21 j 12:00	6° 25 '13	0°34'12	direct	-2604 Sep 23 j 17:56	21° 25 '05	04
min. Earth dist.	-2611 Jun 20 j 20:46	6° 25 '15	29.07027 AU				
direct	-2611 Sep 08 j 10:13	5° 23 '42	1	conjunction	-2603 Jan 03 j 09:09	23° 23 '32	26 0°-4'-14
				minimum elong	-2603 Jan 03 j 09:09	23° 23 '32	26 0°04'19
conjunction	-2611 Dec 19 j 07:23	8° 20 '14	0°29'42	behind sun begin	-2603 Jan 03 j 02:49	23° 23 '31	52
minimum elong	-2611 Dec 19 j 07:23	8° 20 '14	0°29'39	behind sun end	-2603 Jan 03 j 15:28	23° 23 '33	01
max. Earth dist.	-2611 Dec 19 j 23:41	8° 20 '31	31.06632 AU	max. Earth dist.	-2603 Jan 04 j 04:52	23° 23 '34	18 31.01319 AU
retrograde	-2610 Apr 04 j 00:41	10° 23 '33	59	retrograde	-2603 Apr 19 j 21:16	26° 26 '05	45
min. Earth dist.	-2610 Jun 23 j 07:40	9° 21 '04	29.06296 AU	opposition	-2603 Jul 09 j 19:49	24° 24 '41	04 0°-7'-7
opposition	-2610 Jun 24 j 00:54	9° 20 '38	0°29'09	min. Earth dist.	-2603 Jul 08 j 23:36	24° 24 '42	27 29.00797 AU
direct	-2610 Sep 10 j 21:16	7° 24 '46	48	direct	-2603 Sep 26 j 05:31	23° 23 '18	18
conjunction	-2610 Dec 21 j 17:20	10° 21 '47	0°24'57	conjunction	-2602 Jan 05 j 20:04	25° 25 '45	39 0°-9'-5
minimum elong	-2610 Dec 21 j 17:20	10° 21 '47	0°24'53	minimum elong	-2602 Jan 05 j 20:04	25° 25 '45	39 0°09'10
max. Earth dist.	-2610 Dec 22 j 10:02	10° 21 '54	31.05937 AU	behind sun begin	-2602 Jan 05 j 14:36	25° 25 '45	10
retrograde	-2609 Apr 06 j 14:08	12° 24 '46	37	behind sun end	-2602 Jan 06 j 01:33	25° 25 '46	09
opposition	-2609 Jun 26 j 14:02	11° 22 '14	0°24'03	max. Earth dist.	-2602 Jan 06 j 16:22	25° 25 '47	34 31.00222 AU
min. Earth dist.	-2609 Jun 25 j 20:57	11° 22 '23	29.05638 AU	retrograde	-2602 Apr 22 j 09:02	28° 28 '19	03
direct	-2609 Sep 13 j 07:23	9° 25 '59	26	opposition	-2602 Jul 12 j 08:46	26° 26 '54	16 0°-12'-19
				min. Earth dist.	-2602 Jul 11 j 13:07	26° 26 '55	37 28.99689 AU
conjunction	-2609 Dec 24 j 03:41	12° 22 '26	47 0°20'10	direct	-2602 Sep 28 j 16:13	25° 25 '31	28
minimum elong	-2609 Dec 24 j 03:41	12° 22 '26	47 0°20'06				
max. Earth dist.	-2609 Dec 24 j 22:02	12° 22 '28	31 31.05306 AU	conjunction	-2601 Jan 08 j 06:56	27° 27 '58	47 0°-13'-56
retrograde	-2608 Apr 08 j 03:34	14° 25 '59	26	minimum elong	-2601 Jan 08 j 06:55	27° 27 '58	47 0°14'02
min. Earth dist.	-2608 Jun 27 j 08:25	13° 23 '36	17 29.05009 AU	behind sun begin	-2601 Jan 08 j 03:38	27° 27 '58	30
opposition	-2608 Jun 28 j 02:55	13° 23 '35	01 0°18'54	behind sun end	-2601 Jan 08 j 10:13	27° 27 '59	05
direct	-2608 Sep 14 j 18:56	12° 23 '12	16	max. Earth dist.	-2601 Jan 09 j 04:02	28° 28 '00	47 30.99123 AU
					-2601 Mar 10 j 19:39	0° 28 '	
conjunction	-2608 Dec 25 j 14:01	14° 23 '39	38 0°15'21	retrograde	-2601 Apr 24 j 21:26	0° 28 '32	17
minimum elong	-2608 Dec 25 j 14:01	14° 23 '39	38 0°15'16		-2601 Jun 10 j 10:44	30° 30 ' 18 '	
behind sun begin	-2608 Dec 25 j 11:48	14° 23 '39	26	opposition	-2601 Jul 14 j 21:31	29° 29 '07	24 0°-17'-31
behind sun end	-2608 Dec 25 j 16:14	14° 23 '39	50	min. Earth dist.	-2601 Jul 14 j 00:15	29° 29 '08	52 28.98607 AU
max. Earth dist.	-2608 Dec 26 j 08:01	14° 23 '41	20 31.04675 AU	direct	-2601 Oct 01 j 03:57	27° 27 '44	33
retrograde	-2607 Apr 10 j 17:23	17° 27 '12	28		-2600 Jan 05 j 12:25	0° 28 '	
opposition	-2607 Jun 30 j 16:00	15° 24 '48	01 0°13'43				
min. Earth dist.	-2607 Jun 29 j 21:35	15° 24 '49	17 29.04367 AU	conjunction	-2600 Jan 10 j 17:53	0° 28 '11	52 0°-18'-46
direct	-2607 Sep 17 j 04:57	14° 24 '25	18	minimum elong	-2600 Jan 10 j 17:53	0° 28 '11	52 0°18'51
				max. Earth dist.	-2600 Jan 11 j 15:03	0° 28 '13	52 30.98063 AU
conjunction	-2607 Dec 28 j 00:40	16° 24 '52	41 0°10'30	retrograde	-2600 Apr 26 j 09:53	2° 22 '45	28
minimum elong	-2607 Dec 28 j 00:40	16° 24 '52	41 0°10'26	opposition	-2600 Jul 16 j 10:15	1° 22 '20	30 0°-22'-41
behind sun begin	-2607 Dec 27 j 19:35	16° 24 '52	14	min. Earth dist.	-2600 Jul 15 j 13:22	1° 22 '21	57 28.97602 AU

Attention, astronomical year style is used: The year -2600 in astronomical counting style is the year 2601 BCE in historical counting style.

	-2600 Sep 20 j 18:54	30° \overline{R} 27	conjunction	-2591 Jan 30 j 02:04	20° \overline{S} 15'11	-1°00'-21
direct	-2600 Oct 02 j 13:46	29° \overline{S} 57'37	minimum elong	-2591 Jan 30 j 02:04	20° \overline{S} 15'11	1°00'26
	-2600 Oct 14 j 08:04	0° \overline{S}	max. Earth dist.	-2591 Jan 31 j 02:05	20° \overline{S} 17'27	30.91589 AU
			retrograde	-2591 May 17 j 09:55	22° \overline{S} 49'45	
conjunction	-2599 Jan 12 j 05:05	2° \overline{S} 24'58 0°-23'-35	min. Earth dist.	-2591 Aug 05 j 04:27	21° \overline{S} 26'10	28.91218 AU
minimum elong	-2599 Jan 12 j 05:05	2° \overline{S} 24'58 0°23'40	opposition	-2591 Aug 06 j 03:15	21° \overline{S} 24'35	-1°-6'-52
max. Earth dist.	-2599 Jan 13 j 03:45	2° \overline{S} 27'06 30.97107 AU	direct	-2591 Oct 22 j 18:20	20° \overline{S} 01'40	
retrograde	-2599 Apr 28 j 22:43	4° \overline{S} 58'39				
opposition	-2599 Jul 18 j 22:49	3° \overline{S} 33'38 0°-27'-48	conjunction	-2590 Feb 01 j 14:13	22° \overline{S} 29'31	-1°-4'-37
min. Earth dist.	-2599 Jul 18 j 00:30	3° \overline{S} 35'10 28.96697 AU	minimum elong	-2590 Feb 01 j 14:12	22° \overline{S} 29'31	1°04'41
direct	-2599 Oct 05 j 01:10	2° \overline{S} 10'44	max. Earth dist.	-2590 Feb 02 j 15:06	22° \overline{S} 31'52	30.90700 AU
			retrograde	-2590 May 19 j 22:29	25° \overline{S} 04'08	
conjunction	-2598 Jan 14 j 16:05	4° \overline{S} 38'06 0°-28'-21	opposition	-2590 Aug 08 j 15:31	23° \overline{S} 38'54	-1°-11'-22
minimum elong	-2598 Jan 14 j 16:05	4° \overline{S} 38'06 0°28'26	min. Earth dist.	-2590 Aug 07 j 15:54	23° \overline{S} 40'32	28.90304 AU
max. Earth dist.	-2598 Jan 15 j 14:26	4° \overline{S} 40'13 30.96254 AU	direct	-2590 Oct 25 j 05:39	22° \overline{S} 15'54	
retrograde	-2598 May 01 j 12:41	7° \overline{S} 11'55				
opposition	-2598 Jul 21 j 11:29	5° \overline{S} 46'52 0°-32'-54	conjunction	-2589 Feb 04 j 02:21	24° \overline{S} 43'47	-1°-8'-47
min. Earth dist.	-2598 Jul 20 j 13:11	5° \overline{S} 48'24 28.95913 AU	minimum elong	-2589 Feb 04 j 02:20	24° \overline{S} 43'47	1°08'52
direct	-2598 Oct 07 j 11:01	4° \overline{S} 23'57	max. Earth dist.	-2589 Feb 05 j 02:21	24° \overline{S} 46'02	30.89782 AU
			retrograde	-2589 May 22 j 11:51	27° \overline{S} 18'26	
conjunction	-2597 Jan 17 j 03:26	6° \overline{S} 51'23 0°-33'-6	min. Earth dist.	-2589 Aug 10 j 04:49	25° \overline{S} 54'43	28.89411 AU
minimum elong	-2597 Jan 17 j 03:26	6° \overline{S} 51'23 0°33'11	opposition	-2589 Aug 11 j 03:49	25° \overline{S} 53'07	-1°-15'-46
max. Earth dist.	-2597 Jan 18 j 03:28	6° \overline{S} 53'39 30.95521 AU	direct	-2589 Oct 27 j 16:03	24° \overline{S} 30'02	
retrograde	-2597 May 04 j 02:17	9° \overline{S} 25'19				
min. Earth dist.	-2597 Jul 23 j 01:01	8° \overline{S} 01'50 28.95230 AU	conjunction	-2588 Feb 06 j 14:40	26° \overline{S} 57'57	-1°-12'-50
opposition	-2597 Jul 24 j 00:04	8° \overline{S} 00'14 0°-37'-57	minimum elong	-2588 Feb 06 j 14:40	26° \overline{S} 57'57	1°12'55
direct	-2597 Oct 09 j 23:47	6° \overline{S} 37'21	max. Earth dist.	-2588 Feb 07 j 15:58	27° \overline{S} 00'20	30.88905 AU
			retrograde	-2588 May 24 j 00:38	29° \overline{S} 32'37	
conjunction	-2596 Jan 19 j 14:43	9° \overline{S} 04'50 0°-37'-48	opposition	-2588 Aug 12 j 15:56	28° \overline{S} 07'14	-1°-20'-4
minimum elong	-2596 Jan 19 j 14:43	9° \overline{S} 04'50 0°37'53	min. Earth dist.	-2588 Aug 11 j 16:31	28° \overline{S} 08'52	28.88574 AU
max. Earth dist.	-2596 Jan 20 j 14:15	9° \overline{S} 07'04 30.94888 AU	direct	-2588 Oct 29 j 04:44	26° \overline{S} 44'05	
retrograde	-2596 May 05 j 17:24	11° \overline{S} 38'54				
opposition	-2596 Jul 25 j 12:41	10° \overline{S} 13'50 0°-42'-57	conjunction	-2587 Feb 08 j 02:58	29° \overline{S} 12'03	-1°-16'-48
min. Earth dist.	-2596 Jul 24 j 13:08	10° \overline{S} 15'27 28.94635 AU	minimum elong	-2587 Feb 08 j 02:58	29° \overline{S} 12'02	1°16'53
direct	-2596 Oct 11 j 10:36	8° \overline{S} 50'57	max. Earth dist.	-2587 Feb 09 j 03:23	29° \overline{S} 14'21	30.88117 AU
				-2587 Mar 01 j 15:29	0° \approx	
conjunction	-2595 Jan 21 j 02:22	11° \overline{S} 18'31 0°-42'-26	retrograde	-2587 May 26 j 14:50	1° \approx 46'44	
minimum elong	-2595 Jan 21 j 02:22	11° \overline{S} 18'31 0°42'32	min. Earth dist.	-2587 Aug 14 j 04:15	0° \approx 22'56	28.87859 AU
max. Earth dist.	-2595 Jan 22 j 03:02	11° \overline{S} 20'51 30.94300 AU	opposition	-2587 Aug 15 j 03:54	0° \approx 21'18	-1°-24'-14
retrograde	-2595 May 08 j 05:34	13° \overline{S} 52'42		-2587 Aug 28 j 00:20	30° \overline{R} 3	
min. Earth dist.	-2595 Jul 27 j 01:52	12° \overline{S} 29'15 28.94060 AU	direct	-2587 Oct 31 j 15:20	28° \overline{S} 58'05	
opposition	-2595 Jul 28 j 01:08	12° \overline{S} 27'38 0°-47'-53		-2586 Jan 01 j 04:15	0° \approx	
direct	-2595 Oct 13 j 22:15	11° \overline{S} 04'47				
			conjunction	-2586 Feb 10 j 15:24	1° \approx 26'06	-1°-20'-38
conjunction	-2594 Jan 23 j 14:04	13° \overline{S} 32'26 0°-47'-2	minimum elong	-2586 Feb 10 j 15:23	1° \approx 26'06	1°20'42
minimum elong	-2594 Jan 23 j 14:04	13° \overline{S} 32'26 0°47'06	max. Earth dist.	-2586 Feb 11 j 16:54	1° \approx 28'30	30.87454 AU
max. Earth dist.	-2594 Jan 24 j 14:29	13° \overline{S} 34'45 30.93729 AU	retrograde	-2586 May 17 j 03:27	4° \approx 00'49	
retrograde	-2594 May 10 j 20:15	16° \overline{S} 06'44	opposition	-2586 Aug 17 j 15:57	2° \approx 35'21	-1°-28'-16
opposition	-2594 Jul 30 j 13:40	14° \overline{S} 41'40 0°-52'-45	min. Earth dist.	-2586 Aug 16 j 16:27	2° \approx 36'59	28.87274 AU
min. Earth dist.	-2594 Jul 29 j 13:38	14° \overline{S} 43'20 28.93478 AU	direct	-2586 Nov 03 j 03:15	1° \approx 12'06	
direct	-2594 Oct 16 j 09:53	13° \overline{S} 18'50				
			conjunction	-2585 Feb 13 j 03:44	3° \approx 40'10	-1°-24'-21
conjunction	-2593 Jan 26 j 01:50	15° \overline{S} 46'33 0°-51'-33	minimum elong	-2585 Feb 13 j 03:44	3° \approx 40'10	1°24'26
minimum elong	-2593 Jan 26 j 01:49	15° \overline{S} 46'33 0°51'38	max. Earth dist.	-2585 Feb 14 j 04:59	3° \approx 42'33	30.86949 AU
max. Earth dist.	-2593 Jan 27 j 02:30	15° \overline{S} 48'53 30.93104 AU	retrograde	-2585 May 31 j 18:48	6° \approx 14'55	
retrograde	-2593 May 13 j 09:13	18° \overline{S} 20'59	min. Earth dist.	-2585 Aug 19 j 03:36	4° \approx 51'08	28.86844 AU
min. Earth dist.	-2593 Aug 01 j 03:20	16° \overline{S} 57'29 28.92822 AU	opposition	-2585 Aug 20 j 03:56	4° \approx 49'26	-1°-32'-11
opposition	-2593 Aug 02 j 02:20	16° \overline{S} 55'54 0°-57'-33	direct	-2585 Nov 05 j 15:31	3° \approx 26'09	
direct	-2593 Oct 18 j 20:39	15° \overline{S} 33'03				
			conjunction	-2584 Feb 15 j 16:22	5° \approx 54'19	-1°-27'-57
conjunction	-2592 Jan 28 j 13:58	18° \overline{S} 00'50 0°-55'-59	minimum elong	-2584 Feb 15 j 16:22	5° \approx 54'19	1°28'00
minimum elong	-2592 Jan 28 j 13:57	18° \overline{S} 00'50 0°56'03	max. Earth dist.	-2584 Feb 16 j 18:00	5° \approx 56'44	30.86571 AU
max. Earth dist.	-2592 Jan 29 j 14:45	18° \overline{S} 03'11 30.92403 AU	retrograde	-2584 Jun 02 j 07:24	8° \approx 29'06	
retrograde	-2592 May 14 j 21:48	20° \overline{S} 35'21	opposition	-2584 Aug 21 j 15:51	7° \approx 03'37	-1°-35'-57
opposition	-2592 Aug 03 j 14:43	19° \overline{S} 10'14 -1°-2'-15	min. Earth dist.	-2584 Aug 20 j 16:27	7° \approx 05'16	28.86535 AU
min. Earth dist.	-2592 Aug 02 j 14:49	19° \overline{S} 11'53 28.92070 AU	direct	-2584 Nov 07 j 02:33	5° \approx 40'20	
direct	-2592 Oct 20 j 08:30	17° \overline{S} 47'21				

Attention, astronomical year style is used: The year -2583 in astronomical counting style is the year 2584 BCE in historical counting style.

conjunction	-2583 Feb 17 j 05:10	8°08'35	-1°-31'-25	direct	-2576 Nov 24 j 21:27	23°38'05	
minimum elong	-2583 Feb 17 j 05:09	8°08'35	1°31'30				
max. Earth dist.	-2583 Feb 18 j 06:59	8°11'01	30.86318 AU	conjunction	-2575 Mar 07 j 15:25	26°07'03	-1°-53'-46
retrograde	-2583 Jun 04 j 21:00	10°43'25		minimum elong	-2575 Mar 07 j 15:25	26°07'03	1°53'50
min. Earth dist.	-2583 Aug 23 j 03:24	9°19'40	28.86323 AU	max. Earth dist.	-2575 Mar 08 j 13:56	26°09'10	30.83741 AU
opposition	-2583 Aug 24 j 03:42	9°17'58	-1°-39'-35	retrograde	-2575 Jun 23 j 06:59	28°41'53	
direct	-2583 Nov 09 j 14:18	7°54'41		min. Earth dist.	-2575 Sep 10 j 05:55	27°17'50	28.83725 AU
				opposition	-2575 Sep 11 j 01:43	27°16'26	-2°-2'-48
conjunction	-2582 Feb 19 j 17:51	10°23'01	-1°-34'-44	direct	-2575 Nov 27 j 09:07	25°52'48	
minimum elong	-2582 Feb 19 j 17:51	10°23'01	1°34'48				
max. Earth dist.	-2582 Feb 20 j 19:02	10°25'24	30.86122 AU	conjunction	-2574 Mar 10 j 04:50	28°21'50	-1°-55'-49
retrograde	-2582 Jun 07 j 09:54	12°57'55		minimum elong	-2574 Mar 10 j 04:49	28°21'50	1°55'52
opposition	-2582 Aug 26 j 15:43	11°32'30	-1°-43'-4	max. Earth dist.	-2574 Mar 11 j 03:14	28°23'56	30.83456 AU
min. Earth dist.	-2582 Aug 25 j 16:36	11°34'07	28.86153 AU		-2574 Apr 26 j 08:26	0°	
direct	-2582 Nov 12 j 00:04	10°09'13		retrograde	-2574 Jun 25 j 21:00	0°56'38	
					-2574 Aug 27 j 04:32	30°	
conjunction	-2581 Feb 22 j 07:01	12°37'40	-1°-37'-55	opposition	-2574 Sep 13 j 13:04	29°31'11	-2°-4'-54
minimum elong	-2581 Feb 22 j 07:00	12°37'40	1°38'00	min. Earth dist.	-2574 Sep 12 j 16:29	29°32'38	28.83505 AU
max. Earth dist.	-2581 Feb 23 j 08:45	12°40'05	30.85951 AU	direct	-2574 Nov 29 j 21:32	28°07'30	
	-2581 May 13 j 02:41	15°			-2573 Feb 24 j 08:39	0°	
retrograde	-2581 Jun 09 j 23:09	15°12'36					
	-2581 Jul 08 j 03:11	15°		conjunction	-2573 Mar 12 j 18:22	0°36'37	-1°-57'-42
min. Earth dist.	-2581 Aug 28 j 03:59	13°48'52	28.85967 AU	minimum elong	-2573 Mar 12 j 18:22	0°36'37	1°57'46
opposition	-2581 Aug 29 j 03:31	13°47'12	-1°-46'-23	max. Earth dist.	-2573 Mar 13 j 16:02	0°38'39	30.83294 AU
direct	-2581 Nov 14 j 11:20	12°23'55		retrograde	-2573 Jun 28 j 10:23	3°11'22	
				min. Earth dist.	-2573 Sep 15 j 05:04	1°47'19	28.83426 AU
conjunction	-2580 Feb 24 j 20:12	14°52'28	-1°-40'-58	opposition	-2573 Sep 16 j 00:27	1°45'56	-2°-6'-49
minimum elong	-2580 Feb 24 j 20:12	14°52'28	1°41'01	direct	-2573 Dec 02 j 07:57	0°22'14	
max. Earth dist.	-2580 Feb 25 j 20:27	14°54'45	30.85729 AU				
	-2580 Feb 28 j 04:10	15°		conjunction	-2572 Mar 14 j 08:12	2°51'26	-1°-59'-24
retrograde	-2580 Jun 11 j 12:18	17°27'26		minimum elong	-2572 Mar 14 j 08:11	2°51'26	1°59'27
opposition	-2580 Aug 30 j 15:30	16°02'04	-1°-49'-33	max. Earth dist.	-2572 Mar 15 j 06:18	2°53'31	30.83287 AU
min. Earth dist.	-2580 Aug 29 j 17:11	16°03'38	28.85715 AU	retrograde	-2572 Jun 29 j 23:14	5°26'09	
	-2580 Oct 11 j 02:53	15°		opposition	-2572 Sep 17 j 11:43	4°00'46	-2°-8'-32
direct	-2580 Nov 15 j 21:31	14°38'45		min. Earth dist.	-2572 Sep 16 j 15:46	4°02'10	28.83480 AU
	-2580 Dec 21 j 01:47	15°		direct	-2572 Dec 03 j 19:42	2°37'01	
conjunction	-2579 Feb 26 j 09:40	17°07'24	-1°-43'-51	conjunction	-2571 Mar 16 j 21:51	5°06'19	-2°00'-56
minimum elong	-2579 Feb 26 j 09:40	17°07'24	1°43'55	minimum elong	-2571 Mar 16 j 21:51	5°06'19	2°00'59
max. Earth dist.	-2579 Feb 27 j 10:25	17°09'44	30.85420 AU	max. Earth dist.	-2571 Mar 17 j 18:39	5°08'17	30.83401 AU
retrograde	-2579 Jun 14 j 00:41	19°42'22		retrograde	-2571 Jul 02 j 11:16	7°41'01	
min. Earth dist.	-2579 Sep 01 j 05:12	18°18'33	28.85358 AU	opposition	-2571 Sep 19 j 23:01	6°15'41	-2°-10'-4
opposition	-2579 Sep 02 j 03:15	18°17'00	-1°-52'-33	min. Earth dist.	-2571 Sep 19 j 04:08	6°17'01	28.83659 AU
direct	-2579 Nov 18 j 09:43	16°53'38		direct	-2571 Dec 06 j 05:46	4°51'56	
conjunction	-2578 Feb 28 j 23:00	19°22'22	-1°-46'-34	conjunction	-2570 Mar 19 j 11:49	7°21'21	-2°-2'-16
minimum elong	-2578 Feb 28 j 22:59	19°22'22	1°46'37	minimum elong	-2570 Mar 19 j 11:48	7°21'21	2°02'18
max. Earth dist.	-2578 Mar 01 j 22:04	19°24'32	30.85028 AU	max. Earth dist.	-2570 Mar 20 j 09:18	7°23'22	30.83624 AU
retrograde	-2578 Jun 16 j 14:59	21°57'19		retrograde	-2570 Jul 04 j 23:11	9°55'59	
opposition	-2578 Sep 04 j 15:03	20°31'56	-1°-55'-23	opposition	-2570 Sep 22 j 10:15	8°30'44	-2°-11'-23
min. Earth dist.	-2578 Sep 03 j 17:27	20°33'28	28.84941 AU	min. Earth dist.	-2570 Sep 21 j 15:37	8°32'03	28.83910 AU
direct	-2578 Nov 20 j 20:15	19°08'30		direct	-2570 Dec 08 j 17:01	7°06'58	
conjunction	-2577 Mar 03 j 12:24	21°37'19	-1°-49'-8	conjunction	-2569 Mar 22 j 01:42	9°36'30	-2°-3'-24
minimum elong	-2577 Mar 03 j 12:24	21°37'19	1°49'12	minimum elong	-2569 Mar 22 j 01:42	9°36'30	2°03'27
max. Earth dist.	-2577 Mar 04 j 11:55	21°39'32	30.84580 AU	max. Earth dist.	-2569 Mar 22 j 21:26	9°38'21	30.83897 AU
retrograde	-2577 Jun 19 j 03:37	24°12'14		retrograde	-2569 Jul 07 j 13:20	12°11'07	
min. Earth dist.	-2577 Sep 06 j 05:59	22°48'18	28.84486 AU	opposition	-2569 Sep 24 j 21:32	10°45'55	-2°-12'-30
opposition	-2577 Sep 07 j 02:46	22°46'50	-1°-58'-2	min. Earth dist.	-2569 Sep 24 j 03:37	10°47'11	28.84186 AU
direct	-2577 Nov 23 j 08:35	21°23'20		direct	-2569 Dec 11 j 02:53	9°22'07	
conjunction	-2576 Mar 05 j 01:54	23°52'13	-1°-51'-32	conjunction	-2568 Mar 23 j 16:02	11°51'47	-2°-4'-22
minimum elong	-2576 Mar 05 j 01:53	23°52'13	1°51'35	minimum elong	-2568 Mar 23 j 16:02	11°51'47	2°04'23
max. Earth dist.	-2576 Mar 06 j 00:23	23°54'20	30.84139 AU	max. Earth dist.	-2568 Mar 24 j 11:46	11°53'38	30.84142 AU
retrograde	-2576 Jun 20 j 18:52	26°27'05		retrograde	-2568 Jul 09 j 01:05	14°26'20	
opposition	-2576 Sep 08 j 14:09	25°01'40	-2°00'-30	opposition	-2568 Sep 26 j 08:43	13°01'11	-2°-13'-25
min. Earth dist.	-2576 Sep 07 j 17:09	25°03'08	28.84069 AU	min. Earth dist.	-2568 Sep 25 j 16:04	13°02'22	28.84398 AU

Attention, astronomical year style is used: The year -2568 in astronomical counting style is the year 2569 BCE in historical counting style.

direct	-2568 Dec 12 j 15:05	11° R 37'22			direct	-2560 Nov 22 j 13:27	30° R 36'12	
conjunction	-2567 Mar 26 j 06:19	14° R 07'08	-2°-5'-7		conjunction	-2559 Feb 06 j 05:41	0° V	
minimum elong	-2567 Mar 26 j 06:19	14° R 07'08	2°05'10		minimum elong	-2559 Apr 14 j 00:43	2° V 06'33	-2°-4'-23
max. Earth dist.	-2567 Mar 27 j 00:17	14° R 08'49	30.84320 AU		max. Earth dist.	-2559 Apr 14 j 13:08	2° V 07'43	30.84951 AU
retrograde	-2567 Jul 11 j 15:40	16° R 41'37			retrograde	-2559 Jul 29 j 18:44	4° V 40'06	
opposition	-2567 Sep 28 j 19:58	15° R 16'29	-2°-14'-8		opposition	-2559 Oct 16 j 11:10	3° V 15'10	-2°-12'-30
min. Earth dist.	-2567 Sep 28 j 03:33	15° R 17'39	28.84527 AU		min. Earth dist.	-2559 Oct 16 j 00:56	3° V 15'54	28.85334 AU
direct	-2567 Dec 15 j 03:47	13° R 52'37			direct	-2558 Jan 02 j 01:43	1° V 50'48	
conjunction	-2566 Mar 28 j 20:31	16° R 22'28	-2°-5'-42		conjunction	-2558 Apr 16 j 14:50	4° V 21'15	-2°-3'-25
minimum elong	-2566 Mar 28 j 20:31	16° R 22'28	2°05'43		minimum elong	-2558 Apr 16 j 14:50	4° V 21'15	2°03'26
max. Earth dist.	-2566 Mar 29 j 13:56	16° R 24'06	30.84388 AU		max. Earth dist.	-2558 Apr 17 j 01:45	4° V 22'16	30.85463 AU
retrograde	-2566 Jul 14 j 03:39	18° R 56'52			retrograde	-2558 Aug 01 j 08:21	6° V 54'43	
opposition	-2566 Oct 01 j 07:17	17° R 31'45	-2°-14'-39		opposition	-2558 Oct 18 j 21:50	5° V 29'52	-2°-11'-23
min. Earth dist.	-2566 Sep 30 j 16:40	17° R 32'47	28.84549 AU		min. Earth dist.	-2558 Oct 18 j 11:35	5° V 30'35	28.85893 AU
direct	-2566 Dec 17 j 15:36	16° R 07'48			direct	-2557 Jan 04 j 13:40	4° V 05'29	
conjunction	-2565 Mar 31 j 10:55	18° R 37'43	-2°-6'-5		conjunction	-2557 Apr 19 j 05:21	6° V 36'04	-2°-2'-16
minimum elong	-2565 Mar 31 j 10:55	18° R 37'43	2°06'07		minimum elong	-2557 Apr 19 j 05:21	6° V 36'04	2°02'17
max. Earth dist.	-2565 Apr 01 j 03:17	18° R 39'15	30.84381 AU		max. Earth dist.	-2557 Apr 19 j 16:01	6° V 37'04	30.86056 AU
retrograde	-2565 Jul 16 j 18:07	21° R 11'59			retrograde	-2557 Aug 03 j 19:56	9° V 09'26	
opposition	-2565 Oct 03 j 18:14	19° R 46'52	-2°-14'-57		opposition	-2557 Oct 21 j 08:27	7° V 44'41	-2°-10'-3
min. Earth dist.	-2565 Oct 03 j 03:35	19° R 47'55	28.84504 AU		min. Earth dist.	-2557 Oct 21 j 00:02	7° V 45'17	28.86507 AU
direct	-2565 Dec 20 j 04:57	18° R 22'51			direct	-2556 Jan 07 j 00:34	6° V 20'18	
conjunction	-2564 Apr 02 j 01:17	20° R 52'50	-2°-6'-17		conjunction	-2556 Apr 20 j 19:55	8° V 51'01	-2°00'-56
minimum elong	-2564 Apr 02 j 01:17	20° R 52'50	2°06'18		minimum elong	-2556 Apr 20 j 19:56	8° V 51'01	2°00'57
max. Earth dist.	-2564 Apr 02 j 16:20	20° R 54'14	30.84313 AU		max. Earth dist.	-2556 Apr 21 j 05:21	8° V 51'54	30.86687 AU
retrograde	-2564 Jul 18 j 07:09	23° R 26'58			retrograde	-2556 Aug 05 j 10:19	11° V 24'17	
opposition	-2564 Oct 05 j 05:20	22° R 01'51	-2°-15'-3		opposition	-2556 Oct 22 j 19:03	9° V 59'37	-2°-8'-31
min. Earth dist.	-2564 Oct 04 j 16:25	22° R 02'46	28.84436 AU		min. Earth dist.	-2556 Oct 22 j 10:41	10° V 00'13	28.87120 AU
direct	-2564 Dec 21 j 16:38	20° R 37'45			direct	-2555 Jan 08 j 13:57	8° V 35'13	
conjunction	-2563 Apr 04 j 15:35	23° R 07'47	-2°-6'-17		conjunction	-2555 Apr 23 j 10:24	11° V 06'03	-1°-59'-25
minimum elong	-2563 Apr 04 j 15:36	23° R 07'47	2°06'19		minimum elong	-2555 Apr 23 j 10:24	11° V 06'03	1°59'26
max. Earth dist.	-2563 Apr 05 j 06:31	23° R 09'11	30.84255 AU		max. Earth dist.	-2555 Apr 23 j 18:28	11° V 06'48	30.87268 AU
retrograde	-2563 Jul 20 j 19:39	25° R 41'47			retrograde	-2555 Aug 07 j 23:11	13° V 39'13	
opposition	-2563 Oct 07 j 16:09	24° R 16'40	-2°-14'-57		opposition	-2555 Oct 25 j 05:50	12° V 14'37	-2°-6'-48
min. Earth dist.	-2563 Oct 07 j 03:02	24° R 17'36	28.84392 AU		min. Earth dist.	-2555 Oct 24 j 23:25	12° V 15'04	28.87671 AU
direct	-2563 Dec 24 j 05:39	22° R 52'30			direct	-2554 Jan 11 j 02:02	10° V 50'12	
conjunction	-2562 Apr 07 j 05:47	25° R 22'35	-2°-6'-5		conjunction	-2554 Apr 26 j 01:03	13° V 21'07	-1°-57'-44
minimum elong	-2562 Apr 07 j 05:47	25° R 22'35	2°06'06		minimum elong	-2554 Apr 26 j 01:03	13° V 21'07	1°57'43
max. Earth dist.	-2562 Apr 07 j 19:07	25° R 23'50	30.84249 AU		max. Earth dist.	-2554 Apr 26 j 08:20	13° V 21'48	30.87786 AU
retrograde	-2562 Jul 23 j 07:44	27° R 56'28			retrograde	-2554 Aug 10 j 11:56	15° V 54'07	
opposition	-2562 Oct 10 j 03:00	26° R 31'22	-2°-14'-39		opposition	-2554 Oct 27 j 16:21	14° V 29'35	-2°-4'-53
min. Earth dist.	-2562 Oct 09 j 15:08	26° R 32'13	28.84443 AU		min. Earth dist.	-2554 Oct 27 j 10:11	14° V 30'02	28.88133 AU
direct	-2562 Dec 26 j 16:10	25° R 07'07			direct	-2553 Jan 13 j 15:34	13° V 05'07	
conjunction	-2561 Apr 09 j 20:07	27° R 37'17	-2°-5'-43		conjunction	-2553 Apr 28 j 15:36	15° V 36'07	-1°-55'-51
minimum elong	-2561 Apr 09 j 20:07	27° R 37'17	2°05'44		minimum elong	-2553 Apr 28 j 15:36	15° V 36'07	1°55'51
max. Earth dist.	-2561 Apr 10 j 09:56	27° R 38'34	30.84353 AU		max. Earth dist.	-2553 Apr 28 j 20:45	15° V 36'36	30.88210 AU
retrograde	-2561 Jun 30 j 00:32	0° V			retrograde	-2553 Aug 13 j 00:39	18° V 08'58	
opposition	-2561 Jul 25 j 19:21	0° V 11'02			opposition	-2553 Oct 30 j 03:01	16° V 44'28	-2°-2'-47
min. Earth dist.	-2561 Aug 20 j 18:08	30° R 36'12			min. Earth dist.	-2553 Oct 29 j 22:33	16° V 44'47	28.88519 AU
direct	-2561 Oct 12 j 13:46	28° R 45'58	-2°-14'-8		direct	-2552 Jan 16 j 02:45	15° V 19'56	
conjunction	-2561 Oct 12 j 02:10	28° R 46'48	28.84598 AU		conjunction	-2552 Apr 30 j 06:15	17° V 50'59	-1°-53'-48
direct	-2561 Dec 29 j 03:57	27° R 21'40			minimum elong	-2552 Apr 30 j 06:16	17° V 50'59	1°53'48
conjunction	-2560 Apr 11 j 10:21	29° R 51'55	-2°-5'-8		max. Earth dist.	-2552 Apr 30 j 11:17	17° V 51'27	30.88568 AU
minimum elong	-2560 Apr 11 j 10:21	29° R 51'55	2°05'09		retrograde	-2552 Aug 14 j 12:37	20° V 23'38	
max. Earth dist.	-2560 Apr 11 j 22:23	29° R 53'02	30.84580 AU		opposition	-2552 Oct 31 j 13:27	18° V 59'10	-2°00'-31
retrograde	-2560 Apr 15 j 00:57	0° V			min. Earth dist.	-2552 Oct 31 j 09:43	18° V 59'26	28.88845 AU
opposition	-2560 Jul 27 j 08:06	2° V 25'34			direct	-2551 Jan 17 j 15:29	17° V 34'34	
min. Earth dist.	-2560 Oct 14 j 00:26	1° V 00'33	-2°-13'-25					
min. Earth dist.	-2560 Oct 13 j 13:20	1° V 01'21	28.84901 AU					

Attention, astronomical year style is used: The year -2551 in astronomical counting style is the year 2552 BCE in historical counting style.

conjunction	-2551 May 02 j 20:38	20° Υ 05'39	-1°-51'-36	conjunction	-2543 May 21 j 14:33	7° B 58'04	-1°-28'-12
minimum elong	-2551 May 02 j 20:38	20° Υ 05'39	1°51'35	minimum elong	-2543 May 21 j 14:33	7° B 58'04	1°28'10
max. Earth dist.	-2551 May 02 j 23:30	20° Υ 05'55	30.88899 AU	max. Earth dist.	-2543 May 21 j 11:39	7° B 57'48	30.94722 AU
retrograde	-2551 Aug 17 j 00:09	22° Υ 38'07		retrograde	-2543 Sep 03 j 21:16	10° B 29'15	
opposition	-2551 Nov 02 j 23:53	21° Υ 13'41	-1°-58'-4	opposition	-2543 Nov 20 j 10:11	9° B 05'25	-1°-32'-24
min. Earth dist.	-2551 Nov 02 j 20:57	21° Υ 13'54	28.89186 AU	min. Earth dist.	-2543 Nov 20 j 13:27	9° B 05'11	28.95275 AU
direct	-2550 Jan 20 j 02:21	19° Υ 48'59		direct	-2542 Feb 07 j 03:14	7° B 40'30	
conjunction	-2550 May 05 j 10:58	22° Υ 20'06	-1°-49'-13	conjunction	-2542 May 24 j 04:37	10° B 12'09	-1°-24'-38
minimum elong	-2550 May 05 j 10:58	22° Υ 20'06	1°49'12	minimum elong	-2542 May 24 j 04:37	10° B 12'09	1°24'36
max. Earth dist.	-2550 May 05 j 14:01	22° Υ 20'23	30.89257 AU	max. Earth dist.	-2542 May 23 j 23:25	10° B 11'40	30.95675 AU
retrograde	-2550 Aug 19 j 09:38	24° Υ 52'23		retrograde	-2542 Sep 06 j 09:08	12° B 43'11	
opposition	-2550 Nov 05 j 10:18	23° Υ 27'59	-1°-55'-26	opposition	-2542 Nov 22 j 20:32	11° B 19'27	-1°-28'-31
min. Earth dist.	-2550 Nov 05 j 08:31	23° Υ 28'06	28.89564 AU	min. Earth dist.	-2542 Nov 23 j 00:46	11° B 19'09	28.96184 AU
direct	-2549 Jan 22 j 14:34	22° Υ 03'12		direct	-2541 Feb 09 j 14:26	9° B 54'30	
conjunction	-2549 May 08 j 01:16	24° Υ 34'21	-1°-46'-40	conjunction	-2541 May 26 j 18:59	12° B 26'14	-1°-20'-56
minimum elong	-2549 May 08 j 01:16	24° Υ 34'21	1°46'39	minimum elong	-2541 May 26 j 18:59	12° B 26'14	1°20'54
max. Earth dist.	-2549 May 08 j 02:28	24° Υ 34'27	30.89690 AU	max. Earth dist.	-2541 May 26 j 13:33	12° B 25'44	30.96531 AU
retrograde	-2549 Aug 21 j 22:00	27° Υ 06'26		retrograde	-2541 Sep 08 j 18:55	14° B 57'06	
opposition	-2549 Nov 07 j 20:28	25° Υ 42'04	-1°-52'-38	opposition	-2541 Nov 25 j 06:51	13° B 33'27	-1°-24'-30
min. Earth dist.	-2549 Nov 07 j 18:43	25° Υ 42'11	28.90044 AU	min. Earth dist.	-2541 Nov 25 j 12:37	13° B 33'02	28.96980 AU
direct	-2548 Jan 25 j 02:01	24° Υ 17'13		direct	-2540 Feb 12 j 02:38	12° B 08'29	
conjunction	-2548 May 09 j 15:38	26° Υ 48'24	-1°-43'-59	conjunction	-2540 May 28 j 09:07	14° B 40'15	-1°-17'-7
minimum elong	-2548 May 09 j 15:38	26° Υ 48'24	1°43'57	minimum elong	-2540 May 28 j 09:07	14° B 40'15	1°17'05
max. Earth dist.	-2548 May 09 j 16:46	26° Υ 48'31	30.90225 AU	max. Earth dist.	-2540 May 28 j 01:23	14° B 39'32	30.97296 AU
retrograde	-2548 Aug 23 j 08:02	29° Υ 20'19			-2540 Jun 06 j 06:24	15° B	
opposition	-2548 Nov 09 j 06:53	27° Υ 56'00	-1°-49'-40	retrograde	-2540 Sep 10 j 07:17	17° B 10'56	
min. Earth dist.	-2548 Nov 09 j 06:40	27° Υ 56'01	28.90645 AU	opposition	-2540 Nov 26 j 17:09	15° B 47'21	-1°-20'-21
direct	-2547 Jan 26 j 12:45	26° Υ 31'06		min. Earth dist.	-2540 Nov 26 j 23:12	15° B 46'55	28.97702 AU
conjunction	-2547 May 12 j 05:40	29° Υ 02'20	-1°-41'-7		-2540 Dec 26 j 06:27	15° R B	
minimum elong	-2547 May 12 j 05:41	29° Υ 02'20	1°41'06	direct	-2539 Feb 13 j 13:56	14° B 22'20	
max. Earth dist.	-2547 May 12 j 05:49	29° Υ 02'21	30.90911 AU		-2539 Apr 03 j 02:49	15° B	
	-2547 Jun 07 j 17:02	0° B		conjunction	-2539 May 30 j 23:05	16° B 54'08	-1°-13'-11
retrograde	-2547 Aug 25 j 20:26	1° B 34'05		minimum elong	-2539 May 30 j 23:06	16° B 54'08	1°13'09
opposition	-2547 Nov 11 j 17:06	0° B 09'50	-1°-46'-31	max. Earth dist.	-2539 May 30 j 15:05	16° B 53'24	30.97984 AU
min. Earth dist.	-2547 Nov 11 j 16:28	0° B 09'52	28.91397 AU	retrograde	-2539 Sep 12 j 16:28	19° B 24'39	
	-2547 Nov 17 j 11:26	30° R Υ		opposition	-2539 Nov 29 j 03:30	18° B 01'07	-1°-16'-6
direct	-2546 Jan 29 j 02:19	28° Υ 44'53		min. Earth dist.	-2539 Nov 29 j 11:26	18° B 00'33	28.98365 AU
	-2546 Apr 09 j 01:18	0° B		direct	-2538 Feb 16 j 00:38	16° B 36'03	
conjunction	-2546 May 14 j 19:51	1° B 16'12	-1°-38'-7	conjunction	-2538 Jun 02 j 13:00	19° B 07'52	-1°-9'-9
minimum elong	-2546 May 14 j 19:51	1° B 16'12	1°38'06	minimum elong	-2538 Jun 02 j 13:00	19° B 07'52	1°09'08
max. Earth dist.	-2546 May 14 j 19:14	1° B 16'09	30.91736 AU	max. Earth dist.	-2538 Jun 02 j 03:34	19° B 06'59	30.98650 AU
retrograde	-2546 Aug 28 j 07:52	3° B 47'48		retrograde	-2538 Sep 15 j 03:45	21° B 38'11	
opposition	-2546 Nov 14 j 03:22	2° B 23'38	-1°-43'-13	opposition	-2538 Dec 01 j 13:31	20° B 14'42	-1°-11'-45
min. Earth dist.	-2546 Nov 14 j 04:19	2° B 23'34	28.92290 AU	min. Earth dist.	-2538 Dec 01 j 21:23	20° B 14'09	28.99022 AU
direct	-2545 Jan 31 j 13:53	0° B 58'41		direct	-2537 Feb 18 j 14:29	18° B 49'35	
conjunction	-2545 May 17 j 10:07	3° B 30'05	-1°-34'-57	conjunction	-2537 Jun 05 j 02:54	21° B 21'26	-1°-5'-2
minimum elong	-2545 May 17 j 10:07	3° B 30'05	1°34'56	minimum elong	-2537 Jun 05 j 02:54	21° B 21'26	1°04'59
max. Earth dist.	-2545 May 17 j 09:01	3° B 29'59	30.92696 AU	max. Earth dist.	-2537 Jun 04 j 16:39	21° B 20'29	30.99315 AU
retrograde	-2545 Aug 30 j 20:27	6° B 01'32		retrograde	-2537 Sep 17 j 14:07	23° B 51'34	
opposition	-2545 Nov 16 j 13:34	4° B 37'29	-1°-39'-46	opposition	-2537 Dec 03 j 23:48	22° B 28'07	-1°-7'-17
min. Earth dist.	-2545 Nov 16 j 14:30	4° B 37'25	28.93272 AU	min. Earth dist.	-2537 Dec 04 j 09:18	22° B 27'26	28.99714 AU
direct	-2544 Feb 03 j 03:11	3° B 12'33		direct	-2536 Feb 21 j 02:06	21° B 02'56	
conjunction	-2544 May 19 j 00:15	5° B 44'02	-1°-31'-39	conjunction	-2536 Jun 06 j 16:34	23° B 34'48	-1°00'-48
minimum elong	-2544 May 19 j 00:15	5° B 44'02	1°31'37	minimum elong	-2536 Jun 06 j 16:34	23° B 34'48	1°00'46
max. Earth dist.	-2544 May 18 j 21:27	5° B 43'47	30.93705 AU	max. Earth dist.	-2536 Jun 06 j 05:51	23° B 33'49	31.00046 AU
retrograde	-2544 Sep 01 j 09:10	8° B 15'21		retrograde	-2536 Sep 19 j 01:35	26° B 04'45	
opposition	-2544 Nov 17 j 23:51	6° B 51'24	-1°-36'-9	opposition	-2536 Dec 05 j 09:55	24° B 41'22	-1°-2'-43
min. Earth dist.	-2544 Nov 18 j 02:18	6° B 51'14	28.94293 AU	min. Earth dist.	-2536 Dec 05 j 19:12	24° B 40'43	29.00477 AU
direct	-2543 Feb 04 j 14:17	5° B 26'29		direct	-2535 Feb 22 j 15:31	23° B 16'09	

Attention, astronomical year style is used: The year -2535 in astronomical counting style is the year 2536 BCE in historical counting style.

conjunction	-2535 Jun 09 j 06:06	25° 8 48'02	0°-56'-30	direct	-2527 Mar 12 j 14:59	11° II 00'32	
minimum elong	-2535 Jun 09 j 06:06	25° 8 48'02	0°56'27				
max. Earth dist.	-2535 Jun 08 j 18:05	25° 8 46'56	31.00867 AU	conjunction	-2527 Jun 27 j 17:04	13° II 32'38	0°-19'-36
retrograde	-2535 Sep 21 j 13:45	28° 8 17'49		minimum elong	-2527 Jun 27 j 17:04	13° II 32'38	0°19'33
opposition	-2535 Dec 07 j 20:07	26° 8 54'29	0°-58'-4	max. Earth dist.	-2527 Jun 26 j 22:48	13° II 30'57	31.08844 AU
min. Earth dist.	-2535 Dec 08 j 06:26	26° 8 53'45	29.01367 AU	retrograde	-2527 Oct 09 j 03:17	16° II 01'12	
direct	-2534 Feb 25 j 03:20	25° 8 29'15		opposition	-2527 Dec 25 j 06:29	14° II 38'31	0°-18'-24
				min. Earth dist.	-2527 Dec 25 j 22:41	14° II 37'23	29.09200 AU
conjunction	-2534 Jun 11 j 19:38	28° 8 01'10	0°-52'-6	direct	-2526 Mar 15 j 04:26	13° II 13'13	
minimum elong	-2534 Jun 11 j 19:38	28° 8 01'10	0°52'04	max. Earth dist.	-2526 Jun 29 j 10:17	15° II 43'29	31.09505 AU
max. Earth dist.	-2534 Jun 11 j 07:57	28° 8 00'05	31.01821 AU				
	-2534 Aug 12 j 00:53	0° II		conjunction	-2526 Jun 30 j 06:02	15° II 45'19	0°-14'-48
retrograde	-2534 Sep 24 j 01:07	0° II 30'47		minimum elong	-2526 Jun 30 j 06:01	15° II 45'19	0°14'45
	-2534 Nov 06 j 18:05	30° R 8		behind sun begin	-2526 Jun 30 j 03:34	15° II 45'06	
opposition	-2534 Dec 10 j 06:19	29° 8 07'32	0°-53'-20	behind sun end	-2526 Jun 30 j 08:29	15° II 45'32	
min. Earth dist.	-2534 Dec 10 j 17:02	29° 8 06'47	29.02364 AU	retrograde	-2526 Oct 11 j 14:37	18° II 13'42	
direct	-2533 Feb 27 j 17:17	27° 8 42'18		opposition	-2526 Dec 27 j 16:53	16° II 51'03	0°-13'-15
	-2533 Jun 07 j 23:12	0° II		min. Earth dist.	-2526 Dec 28 j 10:19	16° II 49'50	29.09838 AU
				direct	-2525 Mar 17 j 16:36	15° II 25'42	
conjunction	-2533 Jun 14 j 09:05	0° II 14'16	0°-47'-38				
minimum elong	-2533 Jun 14 j 09:05	0° II 14'16	0°47'35	conjunction	-2525 Jul 02 j 18:57	17° II 57'47	0°-10'00
max. Earth dist.	-2533 Jun 13 j 19:41	0° II 13'02	31.02880 AU	minimum elong	-2525 Jul 02 j 18:58	17° II 57'47	0°09'56
retrograde	-2533 Sep 26 j 12:33	2° II 43'44		behind sun begin	-2525 Jul 02 j 13:41	17° II 57'19	
opposition	-2533 Dec 12 j 16:27	1° II 20'35	0°-48'-31	behind sun end	-2525 Jul 03 j 00:15	17° II 58'15	
min. Earth dist.	-2533 Dec 13 j 03:37	1° II 19'48	29.03469 AU	max. Earth dist.	-2525 Jul 01 j 23:25	17° II 55'58	31.10123 AU
	-2532 Feb 13 j 07:33	30° R 8		retrograde	-2525 Oct 14 j 00:55	20° II 26'00	
direct	-2532 Mar 01 j 04:36	29° 8 55'21		opposition	-2525 Dec 30 j 03:12	19° II 03'22	0°-8'-6
	-2532 Mar 17 j 22:29	0° II		min. Earth dist.	-2525 Dec 30 j 21:09	19° II 02'06	29.10442 AU
				direct	-2524 Mar 19 j 06:53	17° II 37'58	
conjunction	-2532 Jun 15 j 22:39	2° II 27'22	0°-43'-6	max. Earth dist.	-2524 Jul 03 j 10:32	20° II 08'05	31.10741 AU
minimum elong	-2532 Jun 15 j 22:39	2° II 27'22	0°43'03				
max. Earth dist.	-2532 Jun 15 j 09:39	2° II 26'10	31.04014 AU	conjunction	-2524 Jul 04 j 07:36	20° II 10'02	0°-5'-12
retrograde	-2532 Sep 27 j 22:46	4° II 56'41		minimum elong	-2524 Jul 04 j 07:36	20° II 10'02	0°05'09
opposition	-2532 Dec 14 j 02:47	3° II 33'39	0°-43'-38	behind sun begin	-2524 Jul 04 j 01:14	20° II 09'28	
min. Earth dist.	-2532 Dec 14 j 15:09	3° II 32'47	29.04609 AU	behind sun end	-2524 Jul 04 j 13:58	20° II 10'36	
direct	-2531 Mar 03 j 16:53	2° II 08'27		retrograde	-2524 Oct 15 j 12:07	22° II 38'06	
				opposition	-2524 Dec 31 j 13:34	21° II 15'30	0°-2'-57
conjunction	-2531 Jun 18 j 11:50	4° II 40'30	0°-38'-29	min. Earth dist.	-2523 Jan 01 j 07:40	21° II 14'14	29.11094 AU
minimum elong	-2531 Jun 18 j 11:50	4° II 40'31	0°38'26	direct	-2523 Mar 21 j 18:32	19° II 50'04	
max. Earth dist.	-2531 Jun 17 j 20:57	4° II 39'08	31.05161 AU				
retrograde	-2531 Sep 30 j 11:09	7° II 09'41		conjunction	-2523 Jul 06 j 20:04	22° II 22'06	0°00'-19
opposition	-2531 Dec 16 j 13:02	5° II 46'45	0°-38'-40	minimum elong	-2523 Jul 06 j 20:05	22° II 22'06	0°00'15
min. Earth dist.	-2531 Dec 17 j 01:28	5° II 45'53	29.05736 AU	behind sun begin	-2523 Jul 06 j 13:35	22° II 21'32	
direct	-2530 Mar 06 j 04:11	4° II 21'33		behind sun end	-2523 Jul 07 j 02:35	22° II 22'41	
max. Earth dist.	-2530 Jun 20 j 10:16	6° II 52'16	31.06245 AU	max. Earth dist.	-2523 Jul 05 j 23:51	22° II 20'14	31.11420 AU
				asc. node	-2523 Jul 31 j 02:17	23° II 15'05	
conjunction	-2530 Jun 21 j 01:20	6° II 53'39	0°-33'-49	retrograde	-2523 Oct 17 j 21:43	24° II 50'01	
minimum elong	-2530 Jun 21 j 01:21	6° II 53'39	0°33'47	opposition	-2522 Jan 03 j 00:00	23° II 27'28	0°02'12
retrograde	-2530 Oct 02 j 19:57	9° II 22'42		min. Earth dist.	-2522 Jan 03 j 18:56	23° II 26'08	29.11815 AU
opposition	-2530 Dec 18 j 23:22	7° II 59'51	0°-33'-40	direct	-2522 Mar 24 j 07:38	22° II 02'01	
min. Earth dist.	-2530 Dec 19 j 13:46	7° II 58'50	29.06775 AU	max. Earth dist.	-2522 Jul 08 j 10:49	24° II 32'03	31.12200 AU
direct	-2529 Mar 08 j 15:05	6° II 34'39					
				conjunction	-2522 Jul 09 j 08:28	24° II 34'03	0°04'35
conjunction	-2529 Jun 23 j 14:42	9° II 06'46	0°-29'-7	minimum elong	-2522 Jul 09 j 08:27	24° II 34'03	0°04'38
minimum elong	-2529 Jun 23 j 14:43	9° II 06'46	0°29'04	behind sun begin	-2522 Jul 09 j 02:02	24° II 33'29	
max. Earth dist.	-2529 Jun 22 j 22:01	9° II 05'13	31.07235 AU	behind sun end	-2522 Jul 09 j 14:52	24° II 34'37	
retrograde	-2529 Oct 05 j 06:41	11° II 35'39		retrograde	-2522 Oct 20 j 09:31	27° II 01'50	
opposition	-2529 Dec 21 j 09:43	10° II 12'53	0°-28'-36	opposition	-2521 Jan 05 j 10:11	25° II 39'21	0°07'21
min. Earth dist.	-2529 Dec 22 j 00:06	10° II 11'52	29.07698 AU	min. Earth dist.	-2521 Jan 06 j 04:34	25° II 38'03	29.12655 AU
direct	-2528 Mar 10 j 04:10	8° II 47'39		direct	-2521 Mar 26 j 19:19	24° II 13'54	
max. Earth dist.	-2528 Jun 24 j 10:26	11° II 18'10	31.08089 AU				
				conjunction	-2521 Jul 11 j 20:56	26° II 45'57	0°09'22
conjunction	-2528 Jun 25 j 03:56	11° II 19'47	0°-24'-22	minimum elong	-2521 Jul 11 j 20:56	26° II 45'57	0°09'26
minimum elong	-2528 Jun 25 j 03:56	11° II 19'47	0°24'20	behind sun begin	-2521 Jul 11 j 15:29	26° II 45'28	
retrograde	-2528 Oct 06 j 16:34	13° II 48'30		behind sun end	-2521 Jul 12 j 02:23	26° II 46'26	
opposition	-2528 Dec 22 j 20:14	12° II 25'47	0°-23'-31	max. Earth dist.	-2521 Jul 10 j 23:52	26° II 44'00	31.13092 AU
min. Earth dist.	-2528 Dec 23 j 12:22	12° II 24'39	29.08501 AU	retrograde	-2521 Oct 22 j 17:54	29° II 13'37	

Attention, astronomical year style is used: The year -2520 in astronomical counting style is the year 2521 BCE in historical counting style.

opposition	-2520 Jan 07 j 20:44	27° Π 51'13	0°12'29	max. Earth dist.	-2513 Jul 28 j 19:29	14° Θ 19'17	31.19801 AU
min. Earth dist.	-2520 Jan 08 j 16:22	27° Π 49'51	29.13602 AU	retrograde	-2513 Nov 09 j 06:50	16° Θ 48'34	
direct	-2520 Mar 28 j 06:19	26° Π 25'48		opposition	-2512 Jan 25 j 09:50	15° Θ 26'34	0°52'15
max. Earth dist.	-2520 Jul 12 j 11:13	28° Π 55'50	31.14090 AU	min. Earth dist.	-2512 Jan 26 j 08:19	15° Θ 25'01	29.20096 AU
				direct	-2512 Apr 15 j 08:28	14° Θ 01'13	
conjunction	-2520 Jul 13 j 09:03	28° Π 57'52	0°14'09	max. Earth dist.	-2512 Jul 30 j 07:38	16° Θ 30'48	31.20285 AU
minimum elong	-2520 Jul 13 j 09:03	28° Π 57'52	0°14'13				
behind sun begin	-2520 Jul 13 j 06:02	28° Π 57'36		conjunction	-2512 Jul 31 j 08:32	16° Θ 33'06	0°51'10
behind sun end	-2520 Jul 13 j 12:04	28° Π 58'08		minimum elong	-2512 Jul 31 j 08:32	16° Θ 33'06	0°51'13
	-2520 Aug 11 j 01:19	0° Θ		retrograde	-2512 Nov 10 j 14:52	18° Θ 59'54	
retrograde	-2520 Oct 24 j 04:05	1° Θ 25'27		opposition	-2511 Jan 26 j 20:43	17° Θ 37'54	0°56'56
opposition	-2519 Jan 09 j 07:07	0° Θ 03'08	0°17'36	min. Earth dist.	-2511 Jan 27 j 20:21	17° Θ 36'16	29.20590 AU
min. Earth dist.	-2519 Jan 10 j 02:06	0° Θ 01'49	29.14629 AU	direct	-2511 Apr 17 j 20:27	16° Θ 12'31	
	-2519 Jan 11 j 04:03	30° \mathbb{R} Π					
direct	-2519 Mar 30 j 18:23	28° Π 37'46		conjunction	-2511 Aug 02 j 19:48	18° Θ 44'20	0°55'30
	-2519 Jun 13 j 08:25	0° Θ		minimum elong	-2511 Aug 02 j 19:48	18° Θ 44'20	0°55'34
				max. Earth dist.	-2511 Aug 01 j 18:24	18° Θ 41'58	31.20797 AU
conjunction	-2519 Jul 15 j 21:17	1° Θ 09'51	0°18'56	retrograde	-2511 Nov 13 j 00:32	21° Θ 11'01	
minimum elong	-2519 Jul 15 j 21:17	1° Θ 09'51	0°19'00	opposition	-2510 Jan 29 j 07:20	19° Θ 49'01	1°01'32
max. Earth dist.	-2519 Jul 14 j 23:20	1° Θ 07'49	31.15128 AU	min. Earth dist.	-2510 Jan 30 j 06:01	19° Θ 47'27	29.21132 AU
retrograde	-2519 Oct 26 j 13:54	3° Θ 37'22		direct	-2510 Apr 20 j 08:55	18° Θ 23'37	
opposition	-2518 Jan 11 j 17:36	2° Θ 15'08	0°22'42	max. Earth dist.	-2510 Aug 04 j 05:58	20° Θ 53'01	31.21370 AU
min. Earth dist.	-2518 Jan 12 j 13:58	2° Θ 13'43	29.15679 AU				
direct	-2518 Apr 02 j 03:39	0° Θ 49'48		conjunction	-2510 Aug 05 j 07:05	20° Θ 55'22	0°59'46
max. Earth dist.	-2518 Jul 17 j 11:10	3° Θ 19'50	31.16161 AU	minimum elong	-2510 Aug 05 j 07:04	20° Θ 55'21	0°59'49
				retrograde	-2510 Nov 15 j 09:51	23° Θ 21'58	
conjunction	-2518 Jul 18 j 09:28	3° Θ 21'54	0°23'41	opposition	-2509 Jan 31 j 18:16	21° Θ 59'58	1°06'02
minimum elong	-2518 Jul 18 j 09:28	3° Θ 21'54	0°23'45	min. Earth dist.	-2509 Feb 01 j 17:40	21° Θ 58'21	29.21768 AU
retrograde	-2518 Oct 29 j 00:18	5° Θ 49'21		direct	-2509 Apr 22 j 18:49	20° Θ 34'34	
opposition	-2517 Jan 14 j 04:10	4° Θ 27'12	0°27'46				
min. Earth dist.	-2517 Jan 15 j 00:23	4° Θ 25'48	29.16672 AU	conjunction	-2509 Aug 07 j 18:09	23° Θ 06'16	1°03'56
direct	-2517 Apr 04 j 16:35	3° Θ 01'54		minimum elong	-2509 Aug 07 j 18:09	23° Θ 06'16	1°04'00
				max. Earth dist.	-2509 Aug 06 j 17:29	23° Θ 03'58	31.22058 AU
conjunction	-2517 Jul 20 j 21:35	5° Θ 34'01	0°28'24	retrograde	-2509 Nov 17 j 19:07	25° Θ 32'48	
minimum elong	-2517 Jul 20 j 21:34	5° Θ 34'01	0°28'28	opposition	-2508 Feb 03 j 05:10	24° Θ 10'51	1°10'27
max. Earth dist.	-2517 Jul 19 j 22:04	5° Θ 31'50	31.17103 AU	min. Earth dist.	-2508 Feb 04 j 03:40	24° Θ 09'18	29.22507 AU
retrograde	-2517 Oct 31 j 11:37	8° Θ 01'22		direct	-2508 Apr 24 j 07:42	22° Θ 45'29	
opposition	-2516 Jan 16 j 14:53	6° Θ 39'17	0°32'47	max. Earth dist.	-2508 Aug 08 j 04:06	25° Θ 14'48	31.22850 AU
min. Earth dist.	-2516 Jan 17 j 12:06	6° Θ 37'49	29.17577 AU				
direct	-2516 Apr 06 j 04:09	5° Θ 14'00		conjunction	-2508 Aug 09 j 05:10	25° Θ 17'08	1°08'01
max. Earth dist.	-2516 Jul 21 j 10:28	7° Θ 43'57	31.17946 AU	minimum elong	-2508 Aug 09 j 05:10	25° Θ 17'08	1°08'04
				retrograde	-2508 Nov 19 j 05:53	27° Θ 43'39	
conjunction	-2516 Jul 22 j 09:42	7° Θ 46'06	0°33'04	opposition	-2507 Feb 04 j 16:08	26° Θ 21'44	1°14'46
minimum elong	-2516 Jul 22 j 09:42	7° Θ 46'06	0°33'07	min. Earth dist.	-2507 Feb 05 j 14:50	26° Θ 20'10	29.23359 AU
retrograde	-2516 Nov 01 j 21:49	10° Θ 13'22		direct	-2507 Apr 26 j 17:50	24° Θ 56'26	
opposition	-2515 Jan 18 j 01:41	8° Θ 51'20	0°37'44				
min. Earth dist.	-2515 Jan 18 j 23:25	8° Θ 49'49	29.18358 AU	conjunction	-2507 Aug 11 j 16:07	27° Θ 28'04	1°12'00
direct	-2515 Apr 08 j 17:50	7° Θ 26'03		minimum elong	-2507 Aug 11 j 16:06	27° Θ 28'04	1°12'04
				max. Earth dist.	-2507 Aug 10 j 16:06	27° Θ 25'49	31.23727 AU
conjunction	-2515 Jul 24 j 21:29	9° Θ 58'07	0°37'41	retrograde	-2507 Nov 21 j 15:42	29° Θ 54'33	
minimum elong	-2515 Jul 24 j 21:29	9° Θ 58'07	0°37'45	opposition	-2506 Feb 07 j 03:10	28° Θ 32'42	1°18'58
max. Earth dist.	-2515 Jul 23 j 20:42	9° Θ 55'49	31.18665 AU	min. Earth dist.	-2506 Feb 08 j 01:57	28° Θ 31'08	29.24243 AU
retrograde	-2515 Nov 04 j 09:16	12° Θ 25'16		direct	-2506 Apr 29 j 06:15	27° Θ 07'28	
opposition	-2514 Jan 20 j 12:23	11° Θ 03'15	0°42'39	max. Earth dist.	-2506 Aug 13 j 02:00	29° Θ 36'45	31.24608 AU
min. Earth dist.	-2514 Jan 21 j 10:20	11° Θ 01'44	29.19029 AU				
direct	-2514 Apr 11 j 05:18	9° Θ 37'58		conjunction	-2506 Aug 14 j 03:00	29° Θ 39'05	1°15'53
max. Earth dist.	-2514 Jul 26 j 09:15	12° Θ 07'44	31.19273 AU	minimum elong	-2506 Aug 14 j 03:00	29° Θ 39'05	1°15'56
					-2506 Aug 23 j 11:43	0° Ω	
conjunction	-2514 Jul 27 j 09:26	12° Θ 09'59	0°42'15	retrograde	-2506 Nov 24 j 03:32	2° Ω 05'34	
minimum elong	-2514 Jul 27 j 09:26	12° Θ 09'59	0°42'18	opposition	-2505 Feb 09 j 14:11	0° Ω 43'47	1°23'03
retrograde	-2514 Nov 06 j 19:14	14° Θ 37'01		min. Earth dist.	-2505 Feb 10 j 12:43	0° Ω 42'15	29.25118 AU
opposition	-2513 Jan 22 j 23:07	13° Θ 15'01	0°47'29		-2505 Mar 09 j 11:08	30° \mathbb{R} Θ	
min. Earth dist.	-2513 Jan 23 j 22:09	13° Θ 13'25	29.19588 AU	direct	-2505 May 01 j 17:03	29° Θ 18'37	
direct	-2513 Apr 13 j 19:33	11° Θ 49'42			-2505 Jun 22 j 09:51	0° Ω	
conjunction	-2513 Jul 29 j 21:05	14° Θ 21'39	0°46'44	conjunction	-2505 Aug 16 j 14:02	1° Ω 50'13	1°19'39
minimum elong	-2513 Jul 29 j 21:05	14° Θ 21'39	0°46'49	minimum elong	-2505 Aug 16 j 14:01	1° Ω 50'13	1°19'43

Attention, astronomical year style is used: The year -2505 in astronomical counting style is the year 2506 BCE in historical counting style.

max. Earth dist.	-2505 Aug 15 j 14:05	1°047'59	31.25439 AU	conjunction	-2497 Sep 03 j 01:59	19°018'36	1°45'14
retrograde	-2505 Nov 26 j 14:00	4°016'42		minimum elong	-2497 Sep 03 j 01:59	19°018'36	1°45'16
opposition	-2504 Feb 12 j 01:34	2°054'59	1°27'01	retrograde	-2497 Dec 13 j 22:26	21°044'58	
min. Earth dist.	-2504 Feb 13 j 00:53	2°053'23	29.25910 AU	opposition	-2496 Feb 29 j 21:11	20°023'11	1°53'46
direct	-2504 May 03 j 06:39	1°029'52		min. Earth dist.	-2496 Mar 01 j 18:55	20°021'43	29.28779 AU
max. Earth dist.	-2504 Aug 16 j 23:38	3°059'06	31.26176 AU	direct	-2496 May 21 j 04:35	18°058'15	
conjunction	-2504 Aug 18 j 00:41	4°001'27	1°23'19	conjunction	-2496 Sep 04 j 11:59	21°029'12	1°47'47
minimum elong	-2504 Aug 18 j 00:41	4°001'27	1°23'21	minimum elong	-2496 Sep 04 j 11:59	21°029'12	1°47'48
retrograde	-2504 Nov 28 j 02:09	6°027'55		max. Earth dist.	-2496 Sep 03 j 13:44	21°027'07	31.28834 AU
opposition	-2503 Feb 13 j 12:51	5°006'14	1°30'51	retrograde	-2496 Dec 15 j 08:49	23°055'35	
min. Earth dist.	-2503 Feb 14 j 11:24	5°004'41	29.26592 AU	opposition	-2495 Mar 03 j 08:55	22°033'49	1°56'25
direct	-2503 May 05 j 19:15	3°041'11		min. Earth dist.	-2495 Mar 04 j 06:46	22°032'20	29.29175 AU
max. Earth dist.	-2503 Aug 19 j 11:08	6°010'26	31.26778 AU	direct	-2495 May 23 j 17:44	21°008'56	
conjunction	-2503 Aug 20 j 11:36	6°012'43	1°26'51	conjunction	-2495 Sep 06 j 21:52	23°039'49	1°50'11
minimum elong	-2503 Aug 20 j 11:36	6°012'43	1°26'54	minimum elong	-2495 Sep 06 j 21:52	23°039'49	1°50'14
retrograde	-2503 Nov 30 j 10:57	8°039'11		max. Earth dist.	-2495 Sep 05 j 23:12	23°037'42	31.29268 AU
opposition	-2502 Feb 16 j 00:11	7°017'31	1°34'34	retrograde	-2495 Dec 17 j 20:44	26°006'14	
min. Earth dist.	-2502 Feb 17 j 00:01	7°015'53	29.27134 AU	opposition	-2494 Mar 05 j 20:22	24°044'29	1°58'54
direct	-2502 May 08 j 07:11	5°052'30		min. Earth dist.	-2494 Mar 06 j 16:51	24°043'05	29.29631 AU
conjunction	-2502 Aug 22 j 22:21	8°023'59	1°30'15	direct	-2494 May 26 j 05:27	23°019'40	
minimum elong	-2502 Aug 22 j 22:21	8°023'59	1°30'17	max. Earth dist.	-2494 Sep 08 j 10:23	25°048'30	31.29723 AU
max. Earth dist.	-2502 Aug 21 j 21:15	8°021'38	31.27250 AU	conjunction	-2494 Sep 09 j 07:53	25°050'31	1°52'25
retrograde	-2502 Dec 02 j 21:09	10°050'24		minimum elong	-2494 Sep 09 j 07:53	25°050'31	1°52'27
opposition	-2501 Feb 18 j 11:34	9°028'46	1°38'08	retrograde	-2494 Dec 20 j 06:22	28°016'59	
min. Earth dist.	-2501 Feb 19 j 10:33	9°027'11	29.27535 AU	opposition	-2493 Mar 08 j 08:19	26°055'14	2°01'12
direct	-2501 May 10 j 20:09	8°003'46		min. Earth dist.	-2493 Mar 09 j 05:30	26°053'48	29.30085 AU
max. Earth dist.	-2501 Aug 24 j 07:59	10°032'50	31.27578 AU	direct	-2493 May 28 j 17:22	25°030'30	
conjunction	-2501 Aug 25 j 08:58	10°035'10	1°33'31	conjunction	-2493 Sep 11 j 17:40	28°001'17	1°54'30
minimum elong	-2501 Aug 25 j 08:57	10°035'10	1°33'35	minimum elong	-2493 Sep 11 j 17:40	28°001'17	1°54'33
retrograde	-2501 Dec 05 j 06:50	13°001'35		max. Earth dist.	-2493 Sep 10 j 20:17	27°059'16	31.30159 AU
opposition	-2500 Feb 20 j 23:08	11°039'55	1°41'34		-2493 Nov 11 j 23:27	0°00	
min. Earth dist.	-2500 Feb 21 j 22:59	11°038'17	29.27823 AU	retrograde	-2493 Dec 22 j 17:22	0°0027'47	
direct	-2500 May 12 j 06:34	10°014'56			-2492 Feb 02 j 18:55	30°00	
conjunction	-2500 Aug 26 j 19:28	12°046'15	1°36'40	opposition	-2492 Mar 09 j 20:14	29°006'04	2°03'20
minimum elong	-2500 Aug 26 j 19:27	12°046'15	1°36'43	min. Earth dist.	-2492 Mar 10 j 16:06	29°004'43	29.30485 AU
max. Earth dist.	-2500 Aug 25 j 18:56	12°043'57	31.27823 AU	direct	-2492 May 30 j 06:43	27°041'24	
	-2500 Nov 09 j 12:49	15°00			-2492 Sep 07 j 18:24	0°00	
retrograde	-2500 Dec 06 j 15:37	15°012'38		max. Earth dist.	-2492 Sep 12 j 06:33	0°0010'09	31.30505 AU
	-2499 Jan 03 j 09:35	15°00		conjunction	-2492 Sep 13 j 03:35	0°0012'07	1°56'25
opposition	-2499 Feb 22 j 10:32	13°050'57	1°44'51	minimum elong	-2492 Sep 13 j 03:35	0°0012'07	1°56'27
min. Earth dist.	-2499 Feb 23 j 09:37	13°049'22	29.28034 AU	retrograde	-2492 Dec 24 j 03:51	2°0038'41	
direct	-2499 May 14 j 19:48	12°025'57		opposition	-2491 Mar 12 j 08:15	1°0016'58	2°05'18
max. Earth dist.	-2499 Aug 28 j 04:46	14°054'50	31.28012 AU	min. Earth dist.	-2491 Mar 13 j 04:45	1°0015'34	29.30793 AU
conjunction	-2499 Aug 29 j 05:42	14°057'10	1°39'40		-2491 May 10 j 14:26	30°00	
minimum elong	-2499 Aug 29 j 05:42	14°057'10	1°39'43	direct	-2491 Jun 01 j 17:40	29°052'21	
	-2499 Aug 30 j 11:53	15°00			-2491 Jun 23 j 12:31	0°00	
retrograde	-2499 Dec 09 j 01:47	17°023'32		conjunction	-2491 Sep 15 j 13:29	2°0022'59	1°58'10
opposition	-2498 Feb 24 j 22:03	16°001'49	1°47'59	minimum elong	-2491 Sep 15 j 13:28	2°0022'59	1°58'12
min. Earth dist.	-2498 Feb 25 j 21:09	16°000'14	29.28234 AU	max. Earth dist.	-2491 Sep 14 j 17:04	2°0021'04	31.30745 AU
	-2498 Apr 08 j 02:57	15°00		retrograde	-2491 Dec 26 j 12:52	4°0049'37	
direct	-2498 May 17 j 05:51	14°036'49		opposition	-2490 Mar 14 j 20:18	3°0027'53	2°07'05
	-2498 Jun 24 j 12:49	15°00		min. Earth dist.	-2490 Mar 15 j 15:57	3°0026'33	29.30953 AU
conjunction	-2498 Aug 31 j 15:57	17°007'57	1°42'31	direct	-2490 Jun 04 j 06:41	2°0003'19	
minimum elong	-2498 Aug 31 j 15:57	17°007'57	1°42'33	conjunction	-2490 Sep 17 j 23:16	4°0033'52	1°59'45
max. Earth dist.	-2498 Aug 30 j 16:24	17°005'44	31.28215 AU	minimum elong	-2490 Sep 17 j 23:16	4°0033'52	1°59'46
retrograde	-2498 Dec 11 j 10:49	19°034'18		max. Earth dist.	-2490 Sep 17 j 02:19	4°0031'54	31.30825 AU
opposition	-2497 Feb 27 j 09:35	18°012'33	1°50'57	retrograde	-2490 Dec 28 j 23:18	7°0000'32	
min. Earth dist.	-2497 Feb 28 j 08:20	18°010'59	29.28459 AU	opposition	-2489 Mar 17 j 08:27	5°0038'46	2°08'40
direct	-2497 May 19 j 17:46	16°047'34		min. Earth dist.	-2489 Mar 18 j 04:08	5°0037'26	29.30970 AU
max. Earth dist.	-2497 Sep 02 j 02:00	19°016'21	31.28478 AU	direct	-2489 Jun 06 j 16:52	4°0014'14	

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Attention, astronomical year style is used: The year -2489 in astronomical counting style is the year 2490 BCE in historical counting style.

conjunction	-2489 Sep 20 j 09:08	6° $\mathring{\mu}$ 44'42	2°01'09	retrograde	-2480 Jan 17 j 21:49	26° $\mathring{\mu}$ 36'09	
minimum elong	-2489 Sep 20 j 09:08	6° $\mathring{\mu}$ 44'42	2°01'11	opposition	-2480 Apr 05 j 22:59	25° $\mathring{\mu}$ 14'01	2°14'36
max. Earth dist.	-2489 Sep 19 j 13:27	6° $\mathring{\mu}$ 42'51	31.30767 AU	min. Earth dist.	-2480 Apr 06 j 12:12	25° $\mathring{\mu}$ 13'08	29.29593 AU
retrograde	-2489 Dec 31 j 08:37	9° $\mathring{\mu}$ 11'25		direct	-2480 Jun 26 j 02:53	23° $\mathring{\mu}$ 49'54	
opposition	-2488 Mar 18 j 20:44	7° $\mathring{\mu}$ 49'36	2°10'05				
min. Earth dist.	-2488 Mar 19 j 16:11	7° $\mathring{\mu}$ 48'17	29.30837 AU	conjunction	-2480 Oct 08 j 21:05	26° $\mathring{\mu}$ 19'34	2°05'53
direct	-2488 Jun 08 j 04:56	6° $\mathring{\mu}$ 25'05		minimum elong	-2480 Oct 08 j 21:05	26° $\mathring{\mu}$ 19'34	2°05'52
				max. Earth dist.	-2480 Oct 08 j 08:28	26° $\mathring{\mu}$ 18'22	31.29420 AU
conjunction	-2488 Sep 21 j 18:39	8° $\mathring{\mu}$ 55'25	2°02'23	retrograde	-2479 Jan 19 j 07:33	28° $\mathring{\mu}$ 47'04	
minimum elong	-2488 Sep 21 j 18:38	8° $\mathring{\mu}$ 55'25	2°02'24	opposition	-2479 Apr 08 j 11:34	27° $\mathring{\mu}$ 24'55	2°14'18
max. Earth dist.	-2488 Sep 20 j 22:23	8° $\mathring{\mu}$ 53'31	31.30578 AU	min. Earth dist.	-2479 Apr 09 j 00:16	27° $\mathring{\mu}$ 24'04	29.29531 AU
retrograde	-2487 Jan 01 j 20:14	11° $\mathring{\mu}$ 22'12		direct	-2479 Jun 28 j 14:33	26° $\mathring{\mu}$ 00'53	
opposition	-2487 Mar 21 j 08:52	10° $\mathring{\mu}$ 00'19	2°11'19				
min. Earth dist.	-2487 Mar 22 j 03:29	9° $\mathring{\mu}$ 59'04	29.30603 AU	conjunction	-2479 Oct 11 j 06:16	28° $\mathring{\mu}$ 30'27	2°05'30
direct	-2487 Jun 10 j 15:53	8° $\mathring{\mu}$ 35'49		minimum elong	-2479 Oct 11 j 06:16	28° $\mathring{\mu}$ 30'27	2°05'30
max. Earth dist.	-2487 Sep 23 j 09:36	11° $\mathring{\mu}$ 04'17	31.30298 AU	max. Earth dist.	-2479 Oct 10 j 17:14	28° $\mathring{\mu}$ 29'14	31.29320 AU
					-2479 Nov 22 j 16:04	0° $\mathring{\mu}$	
conjunction	-2487 Sep 24 j 04:18	11° $\mathring{\mu}$ 06'02	2°03'27	retrograde	-2478 Jan 21 j 19:26	0° $\mathring{\mu}$ 58'06	
minimum elong	-2487 Sep 24 j 04:18	11° $\mathring{\mu}$ 06'02	2°03'29		-2478 Mar 26 j 21:58	30° $\mathring{\mu}$	
retrograde	-2486 Jan 04 j 06:18	13° $\mathring{\mu}$ 32'51		opposition	-2478 Apr 11 j 00:04	29° $\mathring{\mu}$ 35'55	2°13'48
opposition	-2486 Mar 23 j 21:00	12° $\mathring{\mu}$ 10'54	2°12'22	min. Earth dist.	-2478 Apr 11 j 11:47	29° $\mathring{\mu}$ 35'08	29.29382 AU
min. Earth dist.	-2486 Mar 24 j 15:49	12° $\mathring{\mu}$ 09'38	29.30298 AU	direct	-2478 Jul 01 j 00:58	28° $\mathring{\mu}$ 11'57	
direct	-2486 Jun 13 j 04:31	10° $\mathring{\mu}$ 46'24			-2478 Sep 25 j 02:44	0° $\mathring{\mu}$	
conjunction	-2486 Sep 26 j 13:40	13° $\mathring{\mu}$ 16'31	2°04'20	conjunction	-2478 Oct 13 j 15:39	0° $\mathring{\mu}$ 41'27	2°04'57
minimum elong	-2486 Sep 26 j 13:40	13° $\mathring{\mu}$ 16'31	2°04'21	minimum elong	-2478 Oct 13 j 15:40	0° $\mathring{\mu}$ 41'27	2°04'56
max. Earth dist.	-2486 Sep 25 j 18:51	13° $\mathring{\mu}$ 14'45	31.29995 AU	max. Earth dist.	-2478 Oct 13 j 04:11	0° $\mathring{\mu}$ 40'22	31.29106 AU
retrograde	-2485 Jan 06 j 18:10	15° $\mathring{\mu}$ 43'23		retrograde	-2477 Jan 24 j 06:01	3° $\mathring{\mu}$ 09'12	
opposition	-2485 Mar 26 j 09:12	14° $\mathring{\mu}$ 21'22	2°13'13	opposition	-2477 Apr 13 j 12:55	1° $\mathring{\mu}$ 46'59	2°13'06
min. Earth dist.	-2485 Mar 27 j 02:14	14° $\mathring{\mu}$ 20'13	29.30008 AU	min. Earth dist.	-2477 Apr 14 j 00:45	1° $\mathring{\mu}$ 46'11	29.29100 AU
direct	-2485 Jun 15 j 16:04	12° $\mathring{\mu}$ 56'53		direct	-2477 Jul 03 j 12:27	0° $\mathring{\mu}$ 23'03	
conjunction	-2485 Sep 28 j 22:58	15° $\mathring{\mu}$ 26'54	2°05'03	conjunction	-2477 Oct 16 j 00:47	2° $\mathring{\mu}$ 52'27	2°04'13
minimum elong	-2485 Sep 28 j 22:58	15° $\mathring{\mu}$ 26'54	2°05'04	minimum elong	-2477 Oct 16 j 00:47	2° $\mathring{\mu}$ 52'27	2°04'13
max. Earth dist.	-2485 Sep 28 j 05:38	15° $\mathring{\mu}$ 25'17	31.29722 AU	max. Earth dist.	-2477 Oct 15 j 13:07	2° $\mathring{\mu}$ 51'21	31.28767 AU
retrograde	-2484 Jan 09 j 03:57	17° $\mathring{\mu}$ 53'51		retrograde	-2476 Jan 26 j 18:14	5° $\mathring{\mu}$ 20'19	
opposition	-2484 Mar 27 j 21:37	16° $\mathring{\mu}$ 31'46	2°13'53	opposition	-2476 Apr 15 j 01:41	3° $\mathring{\mu}$ 58'02	2°12'14
min. Earth dist.	-2484 Mar 28 j 14:46	16° $\mathring{\mu}$ 30'37	29.29781 AU	min. Earth dist.	-2476 Apr 15 j 11:54	3° $\mathring{\mu}$ 57'21	29.28689 AU
direct	-2484 Jun 17 j 04:09	15° $\mathring{\mu}$ 07'20		direct	-2476 Jul 04 j 23:10	2° $\mathring{\mu}$ 34'08	
conjunction	-2484 Sep 30 j 08:15	17° $\mathring{\mu}$ 37'15	2°05'34	conjunction	-2476 Oct 17 j 10:07	5° $\mathring{\mu}$ 03'26	2°03'18
minimum elong	-2484 Sep 30 j 08:15	17° $\mathring{\mu}$ 37'15	2°05'35	minimum elong	-2476 Oct 17 j 10:07	5° $\mathring{\mu}$ 03'26	2°03'17
max. Earth dist.	-2484 Sep 29 j 15:41	17° $\mathring{\mu}$ 35'42	31.29547 AU	max. Earth dist.	-2476 Oct 16 j 23:28	5° $\mathring{\mu}$ 02'25	31.28286 AU
retrograde	-2483 Jan 10 j 15:07	20° $\mathring{\mu}$ 04'16		retrograde	-2475 Jan 28 j 05:02	7° $\mathring{\mu}$ 31'23	
opposition	-2483 Mar 30 j 09:43	18° $\mathring{\mu}$ 42'10	2°14'21	opposition	-2475 Apr 17 j 14:24	6° $\mathring{\mu}$ 09'01	2°11'10
min. Earth dist.	-2483 Mar 31 j 00:57	18° $\mathring{\mu}$ 41'08	29.29648 AU	min. Earth dist.	-2475 Apr 18 j 01:07	6° $\mathring{\mu}$ 08'18	29.28151 AU
direct	-2483 Jun 19 j 17:24	17° $\mathring{\mu}$ 17'47		direct	-2475 Jul 07 j 11:24	4° $\mathring{\mu}$ 45'08	
conjunction	-2483 Oct 02 j 17:31	19° $\mathring{\mu}$ 47'39	2°05'55	conjunction	-2475 Oct 19 j 19:18	7° $\mathring{\mu}$ 14'18	2°02'13
minimum elong	-2483 Oct 02 j 17:31	19° $\mathring{\mu}$ 47'39	2°05'57	minimum elong	-2475 Oct 19 j 19:18	7° $\mathring{\mu}$ 14'18	2°02'13
max. Earth dist.	-2483 Oct 02 j 01:42	19° $\mathring{\mu}$ 46'10	31.29455 AU	max. Earth dist.	-2475 Oct 19 j 09:17	7° $\mathring{\mu}$ 13'21	31.27711 AU
retrograde	-2482 Jan 13 j 02:02	22° $\mathring{\mu}$ 14'46		retrograde	-2474 Jan 30 j 17:01	9° $\mathring{\mu}$ 42'20	
opposition	-2482 Apr 01 j 22:05	20° $\mathring{\mu}$ 52'39	2°14'38	opposition	-2474 Apr 20 j 03:06	8° $\mathring{\mu}$ 19'52	2°09'55
min. Earth dist.	-2482 Apr 02 j 13:17	20° $\mathring{\mu}$ 51'38	29.29600 AU	min. Earth dist.	-2474 Apr 20 j 12:05	8° $\mathring{\mu}$ 19'16	29.27526 AU
direct	-2482 Jun 22 j 04:25	19° $\mathring{\mu}$ 28'21		direct	-2474 Jul 10 j 00:55	6° $\mathring{\mu}$ 56'00	
conjunction	-2482 Oct 05 j 02:42	21° $\mathring{\mu}$ 58'09	2°06'06	conjunction	-2474 Oct 22 j 04:17	9° $\mathring{\mu}$ 25'02	2°00'58
minimum elong	-2482 Oct 05 j 02:42	21° $\mathring{\mu}$ 58'09	2°06'06	minimum elong	-2474 Oct 22 j 04:18	9° $\mathring{\mu}$ 25'02	2°00'57
max. Earth dist.	-2482 Oct 04 j 12:21	21° $\mathring{\mu}$ 56'47	31.29439 AU	max. Earth dist.	-2474 Oct 21 j 18:55	9° $\mathring{\mu}$ 24'09	31.27065 AU
retrograde	-2481 Jan 15 j 11:02	24° $\mathring{\mu}$ 25'23		retrograde	-2473 Feb 02 j 04:08	11° $\mathring{\mu}$ 53'10	
opposition	-2481 Apr 04 j 10:28	23° $\mathring{\mu}$ 03'16	2°14'43	opposition	-2473 Apr 22 j 16:00	10° $\mathring{\mu}$ 30'35	2°08'29
min. Earth dist.	-2481 Apr 05 j 00:10	23° $\mathring{\mu}$ 02'20	29.29589 AU	min. Earth dist.	-2473 Apr 23 j 00:53	10° $\mathring{\mu}$ 30'00	29.26884 AU
direct	-2481 Jun 24 j 17:02	21° $\mathring{\mu}$ 39'03		direct	-2473 Jul 12 j 12:21	9° $\mathring{\mu}$ 06'44	
conjunction	-2481 Oct 07 j 11:53	24° $\mathring{\mu}$ 08'47	2°06'05	conjunction	-2473 Oct 24 j 13:22	11° $\mathring{\mu}$ 35'39	1°59'32
minimum elong	-2481 Oct 07 j 11:53	24° $\mathring{\mu}$ 08'47	2°06'06	minimum elong	-2473 Oct 24 j 13:22	11° $\mathring{\mu}$ 35'39	1°59'32
max. Earth dist.	-2481 Oct 06 j 21:30	24° $\mathring{\mu}$ 07'25	31.29440 AU	max. Earth dist.	-2473 Oct 24 j 05:42	11° $\mathring{\mu}$ 34'55	31.26442 AU

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Attention, astronomical year style is used: The year -2472 in astronomical counting style is the year 2473 BCE in historical counting style.

retrograde	-2472 Feb 04 j 13:27	14° 0 03'51		min. Earth dist.	-2464 May 12 j 12:51	0° 0 09'25	29.22847 AU
opposition	-2472 Apr 24 j 04:45	12° 0 41'12	2°06'52		-2464 May 18 j 08:59	30° R 0	
min. Earth dist.	-2472 Apr 24 j 11:51	12° 0 40'43	29.26282 AU	direct	-2464 Jul 31 j 17:48	28° 0 46'11	
direct	-2472 Jul 14 j 01:29	11° 0 17'21			-2464 Oct 08 j 15:38	0° 0 0	
conjunction	-2472 Oct 25 j 22:14	13° 0 46'10	1°57'56	conjunction	-2464 Nov 11 j 23:24	1° 0 14'30	1°39'11
minimum elong	-2472 Oct 25 j 22:14	13° 0 46'10	1°57'55	minimum elong	-2464 Nov 11 j 23:25	1° 0 14'30	1°39'09
max. Earth dist.	-2472 Oct 25 j 14:45	13° 0 45'27	31.25885 AU	max. Earth dist.	-2464 Nov 11 j 23:57	1° 0 14'33	31.22381 AU
retrograde	-2471 Feb 06 j 00:32	16° 0 14'30		retrograde	-2463 Feb 23 j 21:35	3° 0 44'08	
opposition	-2471 Apr 26 j 17:33	14° 0 51'46	2°05'05	opposition	-2463 May 15 j 01:35	2° 0 21'06	1°44'22
min. Earth dist.	-2471 Apr 26 j 23:43	14° 0 51'21	29.25774 AU	min. Earth dist.	-2463 May 15 j 00:38	2° 0 21'10	29.22056 AU
direct	-2471 Jul 16 j 12:17	13° 0 27'58		direct	-2463 Aug 03 j 07:10	0° 0 57'52	
conjunction	-2471 Oct 28 j 07:18	15° 0 56'41	1°56'10	conjunction	-2463 Nov 14 j 08:37	3° 0 26'06	1°36'10
minimum elong	-2471 Oct 28 j 07:19	15° 0 56'41	1°56'09	minimum elong	-2463 Nov 14 j 08:38	3° 0 26'06	1°36'08
max. Earth dist.	-2471 Oct 28 j 01:59	15° 0 56'10	31.25423 AU	max. Earth dist.	-2463 Nov 14 j 08:49	3° 0 26'07	31.21530 AU
retrograde	-2470 Feb 08 j 10:13	18° 0 25'09		retrograde	-2462 Feb 26 j 09:41	5° 0 55'52	
opposition	-2470 Apr 29 j 06:18	17° 0 02'22	2°03'06	opposition	-2462 May 17 j 14:43	4° 0 32'44	1°41'03
min. Earth dist.	-2470 Apr 29 j 11:27	17° 0 02'01	29.25347 AU	min. Earth dist.	-2462 May 17 j 13:20	4° 0 32'50	29.21149 AU
direct	-2470 Jul 19 j 00:25	15° 0 38'38		direct	-2462 Aug 05 j 18:49	3° 0 09'31	
conjunction	-2470 Oct 30 j 16:14	18° 0 07'16	1°54'14	conjunction	-2462 Nov 16 j 18:00	5° 0 37'39	1°32'59
minimum elong	-2470 Oct 30 j 16:14	18° 0 07'16	1°54'12	minimum elong	-2462 Nov 16 j 18:01	5° 0 37'39	1°32'56
max. Earth dist.	-2470 Oct 30 j 11:03	18° 0 06'47	31.25053 AU	max. Earth dist.	-2462 Nov 16 j 20:06	5° 0 37'51	31.20585 AU
retrograde	-2469 Feb 10 j 22:10	20° 0 35'54		retrograde	-2461 Feb 28 j 19:58	8° 0 07'33	
opposition	-2469 May 01 j 19:12	19° 0 13'05	2°00'56	opposition	-2461 May 20 j 03:56	6° 0 44'19	1°37'36
min. Earth dist.	-2469 May 01 j 22:46	19° 0 12'51	29.25009 AU	min. Earth dist.	-2461 May 20 j 01:42	6° 0 44'28	29.20166 AU
direct	-2469 Jul 21 j 10:24	17° 0 49'26		direct	-2461 Aug 08 j 07:42	5° 0 21'07	
conjunction	-2469 Nov 02 j 01:15	20° 0 18'01	1°52'07	conjunction	-2461 Nov 19 j 03:06	7° 0 49'08	1°29'41
minimum elong	-2469 Nov 02 j 01:15	20° 0 18'01	1°52'07	minimum elong	-2461 Nov 19 j 03:07	7° 0 49'08	1°29'39
max. Earth dist.	-2469 Nov 01 j 22:04	20° 0 17'43	31.24736 AU	max. Earth dist.	-2461 Nov 19 j 05:17	7° 0 49'20	31.19607 AU
retrograde	-2468 Feb 13 j 08:51	22° 0 46'49		retrograde	-2460 Mar 02 j 07:18	10° 0 19'09	
opposition	-2468 May 03 j 08:14	21° 0 23'59	1°58'36	opposition	-2460 May 21 j 17:03	8° 0 55'49	1°34'00
min. Earth dist.	-2468 May 03 j 11:34	21° 0 23'46	29.24696 AU	min. Earth dist.	-2460 May 21 j 13:25	8° 0 56'04	29.19195 AU
direct	-2468 Jul 22 j 21:08	20° 0 00'26		direct	-2460 Aug 09 j 18:23	7° 0 32'36	
conjunction	-2468 Nov 03 j 10:19	22° 0 28'57	1°49'51	conjunction	-2460 Nov 20 j 12:28	10° 0 00'32	1°26'16
minimum elong	-2468 Nov 03 j 10:19	22° 0 28'57	1°49'49	minimum elong	-2460 Nov 20 j 12:28	10° 0 00'32	1°26'12
max. Earth dist.	-2468 Nov 03 j 07:23	22° 0 28'40	31.24436 AU	max. Earth dist.	-2460 Nov 20 j 16:30	10° 0 00'55	31.18651 AU
retrograde	-2467 Feb 14 j 21:33	24° 0 57'56		retrograde	-2459 Mar 04 j 17:11	12° 0 30'42	
opposition	-2467 May 05 j 21:00	23° 0 35'05	1°56'05	opposition	-2459 May 24 j 06:02	11° 0 07'16	1°30'16
min. Earth dist.	-2467 May 05 j 22:31	23° 0 34'58	29.24374 AU	min. Earth dist.	-2459 May 24 j 02:01	11° 0 07'32	29.18269 AU
direct	-2467 Jul 25 j 06:58	22° 0 11'36		direct	-2459 Aug 12 j 05:22	9° 0 44'04	
conjunction	-2467 Nov 05 j 19:31	24° 0 40'05	1°47'25	conjunction	-2459 Nov 22 j 21:43	12° 0 11'55	1°22'42
minimum elong	-2467 Nov 05 j 19:32	24° 0 40'05	1°47'24	minimum elong	-2459 Nov 22 j 21:44	12° 0 11'55	1°22'40
max. Earth dist.	-2467 Nov 05 j 17:40	24° 0 39'55	31.24082 AU	max. Earth dist.	-2459 Nov 23 j 02:19	12° 0 12'21	31.17781 AU
retrograde	-2466 Feb 17 j 09:25	27° 0 09'15		retrograde	-2458 Mar 07 j 05:46	14° 0 42'13	
opposition	-2466 May 08 j 10:11	25° 0 46'23	1°53'24	opposition	-2458 May 26 j 19:05	13° 0 18'43	1°26'24
min. Earth dist.	-2466 May 08 j 12:01	25° 0 46'15	29.23981 AU	min. Earth dist.	-2458 May 26 j 12:54	13° 0 19'08	29.17439 AU
direct	-2466 Jul 27 j 18:23	24° 0 23'00		direct	-2458 Aug 14 j 15:31	11° 0 55'33	
conjunction	-2466 Nov 08 j 04:41	26° 0 51'25	1°44'50	conjunction	-2458 Nov 25 j 06:56	14° 0 23'20	1°19'02
minimum elong	-2466 Nov 08 j 04:42	26° 0 51'25	1°44'47	minimum elong	-2458 Nov 25 j 06:56	14° 0 23'20	1°18'58
max. Earth dist.	-2466 Nov 08 j 03:42	26° 0 51'20	31.23649 AU	max. Earth dist.	-2458 Nov 25 j 12:50	14° 0 23'53	31.16994 AU
retrograde	-2465 Feb 19 j 22:40	29° 0 20'45			-2458 Dec 11 j 13:06	15° 0 0	
opposition	-2465 May 10 j 23:17	27° 0 57'51	1°50'33	retrograde	-2457 Mar 09 j 17:32	16° 0 53'48	
min. Earth dist.	-2465 May 10 j 23:24	27° 0 57'50	29.23479 AU	opposition	-2457 May 29 j 08:20	15° 0 30'14	1°22'24
direct	-2465 Jul 30 j 07:02	26° 0 34'32		min. Earth dist.	-2457 May 29 j 02:01	15° 0 30'40	29.16695 AU
conjunction	-2465 Nov 10 j 13:59	29° 0 02'55	1°42'05		-2457 Jun 17 j 09:25	15° R 0 0	
minimum elong	-2465 Nov 10 j 14:00	29° 0 02'55	1°42'04	direct	-2457 Aug 17 j 02:25	14° 0 07'07	
max. Earth dist.	-2465 Nov 10 j 13:12	29° 0 02'50	31.23081 AU		-2457 Oct 13 j 10:03	15° 0 0	
retrograde	-2465 Dec 06 j 07:29	0° 0 0		conjunction	-2457 Nov 27 j 16:21	16° 0 34'51	1°15'14
opposition	-2464 May 12 j 12:29	0° 0 09'27	1°47'32	minimum elong	-2457 Nov 27 j 16:21	16° 0 34'51	1°15'12
				max. Earth dist.	-2457 Nov 27 j 23:36	16° 0 35'32	31.16301 AU

Attention, astronomical year style is used: The year -2456 in astronomical counting style is the year 2457 BCE in historical counting style.

retrograde	-2456 Mar 11 j 06:49	19°M05'29		minimum elong	-2449 Dec 14 j 22:23	4°J11'22	0°41'13
opposition	-2456 May 30 j 21:17	17°M41'51	1°18'17	max. Earth dist.	-2449 Dec 15 j 11:02	4°J12'33	31.09219 AU
min. Earth dist.	-2456 May 30 j 12:59	17°M42'25	29.16020 AU	retrograde	-2448 Mar 29 j 08:09	6°J43'15	
direct	-2456 Aug 18 j 13:43	16°M18'47		opposition	-2448 Jun 18 j 06:47	5°J19'04	0°41'37
				min. Earth dist.	-2448 Jun 17 j 18:00	5°J19'57	29.08643 AU
conjunction	-2456 Nov 29 j 01:44	18°M46'29	1°11'19	direct	-2448 Sep 05 j 08:56	3°J56'10	
minimum elong	-2456 Nov 29 j 01:44	18°M46'29	1°11'15				
max. Earth dist.	-2456 Nov 29 j 09:23	18°M47'13	31.15645 AU	conjunction	-2448 Dec 16 j 08:21	6°J23'32	0°36'41
retrograde	-2455 Mar 13 j 19:38	21°M17'18		minimum elong	-2448 Dec 16 j 08:22	6°J23'32	0°36'37
opposition	-2455 Jun 02 j 10:30	19°M53'38	1°14'02	max. Earth dist.	-2448 Dec 16 j 22:17	6°J24'51	31.08035 AU
min. Earth dist.	-2455 Jun 02 j 02:12	19°M54'12	29.15372 AU	retrograde	-2447 Mar 31 j 21:04	8°J55'33	
direct	-2455 Aug 20 j 23:35	18°M30'37		opposition	-2447 Jun 20 j 19:42	7°J31'17	0°36'41
				min. Earth dist.	-2447 Jun 20 j 04:59	7°J32'17	29.07483 AU
conjunction	-2455 Dec 01 j 11:17	20°M58'18	1°07'17	direct	-2447 Sep 07 j 20:05	6°J08'21	
minimum elong	-2455 Dec 01 j 11:17	20°M58'18	1°07'15				
max. Earth dist.	-2455 Dec 01 j 20:39	20°M59'11	31.14996 AU	conjunction	-2447 Dec 18 j 18:11	8°J35'42	0°32'03
retrograde	-2454 Mar 16 j 07:38	23°M29'16		minimum elong	-2447 Dec 18 j 18:12	8°J35'42	0°32'00
opposition	-2454 Jun 04 j 23:37	22°M05'34	1°09'41	max. Earth dist.	-2447 Dec 19 j 08:28	8°J37'03	31.06915 AU
min. Earth dist.	-2454 Jun 04 j 13:50	22°M06'14	29.14695 AU	retrograde	-2446 Apr 03 j 09:50	11°J07'52	
direct	-2454 Aug 23 j 12:46	20°M42'37		opposition	-2446 Jun 23 j 08:47	9°J43'31	0°31'42
				min. Earth dist.	-2446 Jun 22 j 18:00	9°J44'31	29.06424 AU
conjunction	-2454 Dec 03 j 20:52	23°M10'16	1°03'10	direct	-2446 Sep 10 j 05:40	8°J20'35	
minimum elong	-2454 Dec 03 j 20:52	23°M10'16	1°03'06				
max. Earth dist.	-2454 Dec 04 j 05:57	23°M11'07	31.14301 AU	conjunction	-2446 Dec 21 j 04:19	10°J47'55	0°27'22
retrograde	-2453 Mar 18 j 21:37	25°M41'25		minimum elong	-2446 Dec 21 j 04:19	10°J47'55	0°27'18
opposition	-2453 Jun 07 j 12:55	24°M17'40	1°05'13	max. Earth dist.	-2446 Dec 21 j 20:30	10°J49'27	31.05918 AU
min. Earth dist.	-2453 Jun 07 j 02:45	24°M18'21	29.13967 AU	retrograde	-2445 Apr 05 j 22:38	13°J20'13	
direct	-2453 Aug 25 j 23:58	22°M54'45		opposition	-2445 Jun 25 j 21:40	11°J55'49	0°26'40
				min. Earth dist.	-2445 Jun 25 j 05:11	11°J56'56	29.05484 AU
conjunction	-2453 Dec 06 j 06:42	25°M22'23	0°58'56	direct	-2445 Sep 12 j 18:34	10°J32'54	
minimum elong	-2453 Dec 06 j 06:42	25°M22'23	0°58'54				
max. Earth dist.	-2453 Dec 06 j 17:30	25°M23'24	31.13520 AU	conjunction	-2445 Dec 23 j 14:20	13°J00'15	0°22'39
retrograde	-2452 Mar 20 j 08:44	27°M53'42		minimum elong	-2445 Dec 23 j 14:20	13°J00'15	0°22'35
opposition	-2452 Jun 09 j 02:11	26°M29'54	1°00'39	max. Earth dist.	-2445 Dec 24 j 06:24	13°J01'46	31.05042 AU
min. Earth dist.	-2452 Jun 08 j 15:29	26°M30'37	29.13118 AU	retrograde	-2444 Apr 07 j 13:35	15°J32'43	
direct	-2452 Aug 27 j 12:38	25°M07'01		opposition	-2444 Jun 27 j 10:40	14°J08'15	0°21'35
				min. Earth dist.	-2444 Jun 26 j 17:37	14°J09'25	29.04666 AU
conjunction	-2452 Dec 07 j 16:35	27°M34'36	0°54'38	direct	-2444 Sep 14 j 05:30	12°J45'22	
minimum elong	-2452 Dec 07 j 16:35	27°M34'36	0°54'34				
max. Earth dist.	-2452 Dec 08 j 02:57	27°M35'35	31.12616 AU	conjunction	-2444 Dec 25 j 00:39	15°J12'44	0°17'53
	-2451 Mar 03 j 13:47	0°J		minimum elong	-2444 Dec 25 j 00:39	15°J12'44	0°17'48
retrograde	-2451 Mar 22 j 21:13	0°J06'04		max. Earth dist.	-2444 Dec 25 j 18:39	15°J14'26	31.04266 AU
	-2451 Apr 11 j 10:12	30°RM		retrograde	-2443 Apr 10 j 00:56	17°J45'21	
opposition	-2451 Jun 11 j 15:17	28°M42'12	0°56'01	opposition	-2443 Jun 29 j 23:29	16°J20'52	0°16'28
min. Earth dist.	-2451 Jun 11 j 03:45	28°M42'59	29.12145 AU	min. Earth dist.	-2443 Jun 29 j 05:39	16°J22'05	29.03924 AU
direct	-2451 Aug 29 j 23:34	27°M19'20		direct	-2443 Sep 16 j 17:26	14°J58'02	
conjunction	-2451 Dec 10 j 02:36	29°M46'52	0°50'15	conjunction	-2443 Dec 27 j 10:55	17°J25'24	0°13'05
minimum elong	-2451 Dec 10 j 02:36	29°M46'52	0°50'12	minimum elong	-2443 Dec 27 j 10:55	17°J25'24	0°13'02
max. Earth dist.	-2451 Dec 10 j 14:13	29°M47'58	31.11572 AU	behind sun begin	-2443 Dec 27 j 06:58	17°J25'03	
	-2451 Dec 15 j 20:57	0°J		behind sun end	-2443 Dec 27 j 14:51	17°J25'46	
retrograde	-2450 Mar 25 j 07:51	2°J18'30		max. Earth dist.	-2443 Dec 28 j 04:51	17°J27'06	31.03568 AU
opposition	-2450 Jun 14 j 04:35	0°J54'32	0°51'17	retrograde	-2442 Apr 12 j 14:35	19°J58'12	
min. Earth dist.	-2450 Jun 13 j 17:09	0°J55'18	29.11035 AU	opposition	-2442 Jul 02 j 12:29	18°J33'41	0°11'19
	-2450 Jul 20 j 15:58	30°RM		min. Earth dist.	-2442 Jul 01 j 17:38	18°J34'59	29.03249 AU
direct	-2450 Sep 01 j 11:13	29°M31'40		direct	-2442 Sep 19 j 04:28	17°J10'54	
	-2450 Oct 12 j 15:00	0°J					
conjunction	-2450 Dec 12 j 12:24	1°J59'08	0°45'47	conjunction	-2442 Dec 29 j 21:19	19°J38'18	0°08'17
minimum elong	-2450 Dec 12 j 12:24	1°J59'08	0°45'44	minimum elong	-2442 Dec 29 j 21:20	19°J38'18	0°08'12
max. Earth dist.	-2450 Dec 13 j 00:16	2°J00'16	31.10429 AU	behind sun begin	-2442 Dec 29 j 15:37	19°J37'47	
retrograde	-2449 Mar 27 j 20:46	4°J30'54		behind sun end	-2442 Dec 30 j 03:03	19°J38'49	
opposition	-2449 Jun 16 j 17:45	3°J06'50	0°46'29	max. Earth dist.	-2442 Dec 30 j 16:41	19°J40'07	31.02892 AU
min. Earth dist.	-2449 Jun 16 j 04:40	3°J07'43	29.09849 AU	retrograde	-2441 Apr 15 j 02:29	22°J11'15	
direct	-2449 Sep 03 j 22:09	1°J43'56		min. Earth dist.	-2441 Jul 04 j 06:51	20°J48'00	29.02569 AU
				opposition	-2441 Jul 05 j 01:33	20°J46'43	0°06'09
conjunction	-2449 Dec 14 j 22:22	4°J11'22	0°41'16	direct	-2441 Sep 21 j 16:14	19°J23'58	

Attention, astronomical year style is used: The year -2440 in astronomical counting style is the year 2441 BCE in historical counting style.

conjunction	-2440 Jan 01 j 08:02	21° \mathring{A} 51'23	0°03'27	min. Earth dist.	-2434 Jul 19 j 21:43	6° \mathring{B} 21'19	28.96024 AU
minimum elong	-2440 Jan 01 j 08:01	21° \mathring{A} 51'23	0°03'24	direct	-2434 Oct 06 j 22:16	4° \mathring{B} 56'53	
behind sun begin	-2440 Jan 01 j 01:38	21° \mathring{A} 50'48					
behind sun end	-2440 Jan 01 j 14:24	21° \mathring{A} 51'58		conjunction	-2433 Jan 16 j 12:54	7° \mathring{B} 24'17	0°-30'-17
max. Earth dist.	-2440 Jan 02 j 03:29	21° \mathring{A} 53'14	31.02202 AU	minimum elong	-2433 Jan 16 j 12:54	7° \mathring{B} 24'17	0°30'22
retrograde	-2440 Apr 16 j 16:06	24° \mathring{A} 24'30		max. Earth dist.	-2433 Jan 17 j 11:15	7° \mathring{B} 26'24	30.95562 AU
opposition	-2440 Jul 06 j 14:20	22° \mathring{A} 59'56	0°00'58	retrograde	-2433 May 03 j 10:51	9° \mathring{B} 58'06	
min. Earth dist.	-2440 Jul 05 j 18:24	23° \mathring{A} 01'18	29.01848 AU	min. Earth dist.	-2433 Jul 22 j 09:29	8° \mathring{B} 34'34	28.95195 AU
desc. node	-2440 Sep 13 j 06:58	21° \mathring{A} 38'50		opposition	-2433 Jul 23 j 08:04	8° \mathring{B} 33'00	0°-34'-56
direct	-2440 Sep 23 j 03:13	21° \mathring{A} 37'12		direct	-2433 Oct 09 j 09:42	7° \mathring{B} 10'03	
conjunction	-2439 Jan 02 j 18:50	24° \mathring{A} 04'38	0°-1'-30	conjunction	-2432 Jan 19 j 00:15	9° \mathring{B} 37'30	0°-34'-59
minimum elong	-2439 Jan 02 j 18:50	24° \mathring{A} 04'38	0°01'35	minimum elong	-2432 Jan 19 j 00:15	9° \mathring{B} 37'30	0°35'03
behind sun begin	-2439 Jan 02 j 12:24	24° \mathring{A} 04'04		max. Earth dist.	-2432 Jan 19 j 23:53	9° \mathring{B} 39'44	30.94780 AU
behind sun end	-2439 Jan 03 j 01:16	24° \mathring{A} 05'13		retrograde	-2432 May 04 j 23:15	12° \mathring{B} 11'24	
max. Earth dist.	-2439 Jan 03 j 14:33	24° \mathring{A} 06'30	31.01427 AU	opposition	-2432 Jul 24 j 20:31	10° \mathring{B} 46'17	0°-39'-56
retrograde	-2439 Apr 19 j 03:14	26° \mathring{A} 37'54		min. Earth dist.	-2432 Jul 23 j 22:04	10° \mathring{B} 47'50	28.94481 AU
min. Earth dist.	-2439 Jul 08 j 08:11	25° \mathring{A} 14'37	29.01028 AU	direct	-2432 Oct 10 j 21:34	9° \mathring{B} 23'20	
opposition	-2439 Jul 09 j 03:25	25° \mathring{A} 13'18	0°-4'-12	conjunction	-2431 Jan 20 j 11:39	11° \mathring{B} 50'49	0°-39'-37
direct	-2439 Sep 25 j 13:40	23° \mathring{A} 50'34		minimum elong	-2431 Jan 20 j 11:39	11° \mathring{B} 50'49	0°39'42
conjunction	-2438 Jan 05 j 05:43	26° \mathring{A} 18'00	0°-6'-22	max. Earth dist.	-2431 Jan 21 j 11:28	11° \mathring{B} 53'04	30.94134 AU
minimum elong	-2438 Jan 05 j 05:42	26° \mathring{A} 18'00	0°06'26	retrograde	-2431 May 07 j 13:07	14° \mathring{B} 24'50	
behind sun begin	-2438 Jan 04 j 23:38	26° \mathring{A} 17'27		min. Earth dist.	-2431 Jul 26 j 09:10	13° \mathring{B} 01'21	28.93894 AU
behind sun end	-2438 Jan 05 j 11:46	26° \mathring{A} 18'33		opposition	-2431 Jul 27 j 09:01	12° \mathring{B} 59'43	0°-44'-52
max. Earth dist.	-2438 Jan 06 j 02:10	26° \mathring{A} 19'56	31.00557 AU	direct	-2431 Oct 13 j 08:42	11° \mathring{B} 36'46	
retrograde	-2438 Apr 21 j 16:05	28° \mathring{A} 51'22		conjunction	-2430 Jan 22 j 22:58	14° \mathring{B} 04'19	0°-44'-12
opposition	-2438 Jul 11 j 16:21	27° \mathring{A} 26'42	0°-9'-23	minimum elong	-2430 Jan 22 j 22:57	14° \mathring{B} 04'19	0°44'16
min. Earth dist.	-2438 Jul 10 j 19:48	27° \mathring{A} 28'07	29.00097 AU	max. Earth dist.	-2430 Jan 23 j 23:17	14° \mathring{B} 06'37	30.93584 AU
direct	-2438 Sep 28 j 00:44	26° \mathring{A} 03'57		retrograde	-2430 May 10 j 00:41	16° \mathring{B} 38'29	
conjunction	-2437 Jan 07 j 16:38	28° \mathring{A} 31'22	0°-11'-11	opposition	-2430 Jul 29 j 21:40	15° \mathring{B} 13'21	0°-49'-44
minimum elong	-2437 Jan 07 j 16:38	28° \mathring{A} 31'22	0°11'16	min. Earth dist.	-2430 Jul 28 j 22:24	15° \mathring{B} 14'57	28.93393 AU
behind sun begin	-2437 Jan 07 j 11:52	28° \mathring{A} 30'57		direct	-2430 Oct 15 j 18:57	13° \mathring{B} 50'26	
behind sun end	-2437 Jan 07 j 21:24	28° \mathring{A} 31'48		conjunction	-2429 Jan 25 j 10:42	16° \mathring{B} 18'03	0°-48'-44
max. Earth dist.	-2437 Jan 08 j 12:43	28° \mathring{A} 33'16	30.99574 AU	minimum elong	-2429 Jan 25 j 10:41	16° \mathring{B} 18'03	0°48'49
retrograde	-2437 Feb 18 j 05:34	0° \mathring{B}		max. Earth dist.	-2429 Jan 26 j 11:52	16° \mathring{B} 20'26	30.93118 AU
min. Earth dist.	-2437 Jul 13 j 09:28	29° \mathring{A} 41'27	28.99081 AU	retrograde	-2429 May 12 j 14:16	18° \mathring{B} 52'20	
opposition	-2437 Jul 14 j 05:20	29° \mathring{A} 40'05	0°-14'-33	min. Earth dist.	-2429 Jul 31 j 09:38	17° \mathring{B} 28'54	28.92943 AU
direct	-2437 Sep 30 j 10:30	28° \mathring{A} 17'17		opposition	-2429 Aug 01 j 10:04	17° \mathring{B} 27'13	0°-54'-33
	-2437 Dec 21 j 04:58	0° \mathring{B}		direct	-2429 Oct 18 j 05:34	16° \mathring{B} 04'19	
conjunction	-2436 Jan 10 j 03:45	0° \mathring{B} 44'42	0°-16'00	conjunction	-2428 Jan 27 j 22:30	18° \mathring{B} 32'02	0°-53'-11
minimum elong	-2436 Jan 10 j 03:45	0° \mathring{B} 44'42	0°16'04	minimum elong	-2428 Jan 27 j 22:29	18° \mathring{B} 32'02	0°53'16
behind sun begin	-2436 Jan 10 j 03:10	0° \mathring{B} 44'39		max. Earth dist.	-2428 Jan 28 j 23:08	18° \mathring{B} 34'22	30.92663 AU
behind sun end	-2436 Jan 10 j 04:20	0° \mathring{B} 44'45		retrograde	-2428 May 14 j 03:30	21° \mathring{B} 06'27	
max. Earth dist.	-2436 Jan 11 j 01:09	0° \mathring{B} 46'43	30.98529 AU	opposition	-2428 Aug 02 j 22:40	19° \mathring{B} 41'20	0°-59'-16
retrograde	-2436 Apr 25 j 18:00	3° \mathring{B} 18'15		min. Earth dist.	-2428 Aug 01 j 23:13	19° \mathring{B} 42'58	28.92488 AU
opposition	-2436 Jul 15 j 18:05	1° \mathring{B} 53'24	0°-19'-42	direct	-2428 Oct 19 j 14:50	18° \mathring{B} 18'28	
min. Earth dist.	-2436 Jul 14 j 21:08	1° \mathring{B} 54'50	28.98016 AU	conjunction	-2427 Jan 29 j 10:34	20° \mathring{B} 46'16	0°-57'-34
direct	-2436 Oct 01 j 23:33	0° \mathring{B} 30'33		minimum elong	-2427 Jan 29 j 10:34	20° \mathring{B} 46'16	0°57'39
conjunction	-2435 Jan 11 j 14:42	2° \mathring{B} 57'57	0°-20'-47	max. Earth dist.	-2427 Jan 30 j 12:11	20° \mathring{B} 48'41	30.92173 AU
minimum elong	-2435 Jan 11 j 14:41	2° \mathring{B} 57'57	0°20'53	retrograde	-2427 May 16 j 16:35	23° \mathring{B} 20'47	
max. Earth dist.	-2435 Jan 12 j 11:31	2° \mathring{B} 59'55	30.97466 AU	min. Earth dist.	-2427 Aug 04 j 11:00	21° \mathring{B} 57'21	28.91959 AU
retrograde	-2435 Apr 28 j 08:26	5° \mathring{B} 31'35		opposition	-2427 Aug 05 j 11:05	21° \mathring{B} 55'40	-1°-3'-54
min. Earth dist.	-2435 Jul 17 j 09:44	4° \mathring{B} 08'05	28.96982 AU	direct	-2427 Oct 22 j 03:11	20° \mathring{B} 32'48	
opposition	-2435 Jul 18 j 06:46	4° \mathring{B} 06'38	0°-24'-49	conjunction	-2426 Jan 31 j 22:41	23° \mathring{B} 00'40	-1°-1'-52
direct	-2435 Oct 04 j 10:09	2° \mathring{B} 43'43		minimum elong	-2426 Jan 31 j 22:41	23° \mathring{B} 00'40	1°01'56
conjunction	-2434 Jan 14 j 01:52	5° \mathring{B} 11'08	0°-25'-33	max. Earth dist.	-2426 Feb 01 j 23:03	23° \mathring{B} 02'58	30.91598 AU
minimum elong	-2434 Jan 14 j 01:52	5° \mathring{B} 11'08	0°25'38	retrograde	-2426 May 19 j 07:24	25° \mathring{B} 35'17	
max. Earth dist.	-2434 Jan 15 j 00:23	5° \mathring{B} 13'15	30.96459 AU	opposition	-2426 Aug 07 j 23:42	24° \mathring{B} 10'10	-1°-8'-27
retrograde	-2434 Apr 30 j 20:13	7° \mathring{B} 44'50		min. Earth dist.	-2426 Aug 07 j 00:11	24° \mathring{B} 11'47	28.91343 AU
opposition	-2434 Jul 20 j 19:26	6° \mathring{B} 19'49	0°-29'-54	direct	-2426 Oct 24 j 13:16	22° \mathring{B} 47'15	

Attention, astronomical year style is used: The year -2425 in astronomical counting style is the year 2426 BCE in historical counting style.

conjunction	-2425 Feb 03 j 11:01	25° $\overline{3}$ 15'12	-1°-6'-4	direct	-2418 Nov 11 j 10:36	10° \approx 42'09	
minimum elong	-2425 Feb 03 j 11:01	25° $\overline{3}$ 15'12	1°06'09				
max. Earth dist.	-2425 Feb 04 j 12:17	25° $\overline{3}$ 17'35	30.90916 AU	conjunction	-2417 Feb 21 j 15:14	13° \approx 10'30	-1°-35'-36
retrograde	-2425 May 21 j 20:01	27° $\overline{3}$ 49'52		minimum elong	-2417 Feb 21 j 15:13	13° \approx 10'30	1°35'40
opposition	-2425 Aug 10 j 12:10	26° $\overline{3}$ 24'42	-1°-12'-54	max. Earth dist.	-2417 Feb 22 j 16:01	13° \approx 12'50	30.85956 AU
min. Earth dist.	-2425 Aug 09 j 12:43	26° $\overline{3}$ 26'20	28.90606 AU		-2417 Apr 16 j 10:04	15° \approx	
direct	-2425 Oct 27 j 01:15	25° $\overline{3}$ 01'46		retrograde	-2417 Jun 09 j 06:14	15° \approx 45'23	
					-2417 Aug 03 j 17:16	15° \approx R \approx	
conjunction	-2424 Feb 05 j 23:23	27° $\overline{3}$ 29'45	-1°-10'-10	opposition	-2417 Aug 28 j 12:50	14° \approx 19'58	-1°-43'-56
minimum elong	-2424 Feb 05 j 23:22	27° $\overline{3}$ 29'45	1°10'14	min. Earth dist.	-2417 Aug 27 j 13:32	14° \approx 21'36	28.85965 AU
max. Earth dist.	-2424 Feb 06 j 23:35	27° $\overline{3}$ 32'02	30.90141 AU	direct	-2417 Nov 13 j 19:55	12° \approx 56'39	
	-2424 May 06 j 21:32	0° \approx			-2416 Feb 13 j 00:35	15° \approx	
retrograde	-2424 May 23 j 11:32	0° \approx 04'27					
	-2424 Jun 09 j 02:14	30° \approx R $\overline{3}$		conjunction	-2416 Feb 24 j 04:23	15° \approx 25'07	-1°-38'-42
min. Earth dist.	-2424 Aug 11 j 00:57	28° $\overline{3}$ 40'51	28.89804 AU	minimum elong	-2416 Feb 24 j 04:23	15° \approx 25'07	1°38'45
opposition	-2424 Aug 12 j 00:25	28° $\overline{3}$ 39'14	-1°-17'-14	max. Earth dist.	-2416 Feb 25 j 06:04	15° \approx 27'32	30.85750 AU
direct	-2424 Oct 28 j 13:28	27° $\overline{3}$ 16'13		retrograde	-2416 Jun 10 j 18:47	18° \approx 00'02	
				min. Earth dist.	-2416 Aug 29 j 01:27	16° \approx 36'15	28.85773 AU
conjunction	-2423 Feb 07 j 11:47	29° $\overline{3}$ 44'15	-1°-14'-10	opposition	-2416 Aug 30 j 00:33	16° \approx 34'38	-1°-47'-10
minimum elong	-2423 Feb 07 j 11:47	29° $\overline{3}$ 44'15	1°14'15	direct	-2416 Nov 15 j 07:30	15° \approx 11'19	
max. Earth dist.	-2423 Feb 08 j 12:41	29° $\overline{3}$ 46'36	30.89308 AU				
	-2423 Feb 14 j 10:55	0° \approx		conjunction	-2415 Feb 25 j 17:29	17° \approx 39'53	-1°-41'-39
retrograde	-2423 May 26 j 00:18	2° \approx 18'58		minimum elong	-2415 Feb 25 j 17:29	17° \approx 39'53	1°41'43
opposition	-2423 Aug 14 j 12:43	0° \approx 53'41	-1°-21'-26	max. Earth dist.	-2415 Feb 26 j 17:54	17° \approx 42'11	30.85563 AU
min. Earth dist.	-2423 Aug 13 j 13:53	0° \approx 55'16	28.88976 AU	retrograde	-2415 Jun 13 j 10:00	20° \approx 14'50	
	-2423 Sep 18 j 09:05	30° \approx R $\overline{3}$		opposition	-2415 Sep 01 j 12:26	18° \approx 49'28	-1°-50'-14
direct	-2423 Oct 31 j 02:08	29° $\overline{3}$ 30'37		min. Earth dist.	-2415 Aug 31 j 13:34	18° \approx 51'04	28.85582 AU
	-2423 Dec 11 j 13:04	0° \approx		direct	-2415 Nov 17 j 18:56	17° \approx 26'08	
conjunction	-2422 Feb 10 j 00:03	1° \approx 58'40	-1°-18'-3	conjunction	-2414 Feb 28 j 06:46	19° \approx 54'48	-1°-44'-27
minimum elong	-2422 Feb 10 j 00:03	1° \approx 58'40	1°18'07	minimum elong	-2414 Feb 28 j 06:46	19° \approx 54'48	1°44'29
max. Earth dist.	-2422 Feb 11 j 00:44	2° \approx 01'00	30.88500 AU	max. Earth dist.	-2414 Mar 01 j 07:30	19° \approx 57'07	30.85328 AU
retrograde	-2422 May 28 j 14:16	4° \approx 33'25		retrograde	-2414 Jun 15 j 22:47	22° \approx 29'46	
min. Earth dist.	-2422 Aug 16 j 01:08	3° \approx 09'43	28.88202 AU	min. Earth dist.	-2414 Sep 03 j 02:38	21° \approx 05'56	28.85312 AU
opposition	-2422 Aug 17 j 00:53	3° \approx 08'04	-1°-25'-32	opposition	-2414 Sep 04 j 00:22	21° \approx 04'24	-1°-53'-8
direct	-2422 Nov 02 j 14:08	1° \approx 44'56		direct	-2414 Nov 20 j 07:08	19° \approx 41'03	
conjunction	-2421 Feb 12 j 12:32	4° \approx 13'01	-1°-21'-49	conjunction	-2413 Mar 02 j 20:17	22° \approx 09'48	-1°-47'-5
minimum elong	-2421 Feb 12 j 12:32	4° \approx 13'01	1°21'53	minimum elong	-2413 Mar 02 j 20:17	22° \approx 09'48	1°47'08
max. Earth dist.	-2421 Feb 13 j 13:20	4° \approx 15'21	30.87750 AU	max. Earth dist.	-2413 Mar 03 j 19:54	22° \approx 12'02	30.85019 AU
retrograde	-2421 May 31 j 02:20	6° \approx 47'47		retrograde	-2413 Jun 18 j 13:45	24° \approx 44'46	
opposition	-2421 Aug 19 j 12:58	5° \approx 22'23	-1°-29'-30	opposition	-2413 Sep 06 j 12:03	23° \approx 19'24	-1°-55'-52
min. Earth dist.	-2421 Aug 18 j 14:06	5° \approx 23'59	28.87514 AU	min. Earth dist.	-2413 Sep 05 j 14:08	23° \approx 20'56	28.84959 AU
direct	-2421 Nov 05 j 01:18	3° \approx 59'12		direct	-2413 Nov 22 j 19:18	21° \approx 55'59	
conjunction	-2420 Feb 15 j 01:11	6° \approx 27'20	-1°-25'-28	conjunction	-2412 Mar 04 j 09:52	24° \approx 24'50	-1°-49'-33
minimum elong	-2420 Feb 15 j 01:11	6° \approx 27'20	1°25'31	minimum elong	-2412 Mar 04 j 09:51	24° \approx 24'50	1°49'36
max. Earth dist.	-2420 Feb 16 j 02:31	6° \approx 29'43	30.87120 AU	max. Earth dist.	-2412 Mar 05 j 08:50	24° \approx 26'59	30.84609 AU
retrograde	-2420 Jun 01 j 16:30	9° \approx 02'07		retrograde	-2412 Jun 20 j 02:49	26° \approx 59'46	
min. Earth dist.	-2420 Aug 20 j 00:55	7° \approx 38'22	28.86945 AU	opposition	-2412 Sep 07 j 23:53	25° \approx 34'23	-1°-58'-25
opposition	-2420 Aug 21 j 00:55	7° \approx 36'41	-1°-33'-19	min. Earth dist.	-2412 Sep 07 j 03:29	25° \approx 35'49	28.84518 AU
direct	-2420 Nov 06 j 13:02	6° \approx 13'27		direct	-2412 Nov 24 j 07:06	24° \approx 10'54	
conjunction	-2419 Feb 16 j 13:40	8° \approx 41'39	-1°-28'-59	conjunction	-2411 Mar 06 j 23:20	26° \approx 39'48	-1°-51'-51
minimum elong	-2419 Feb 16 j 13:40	8° \approx 41'39	1°29'03	minimum elong	-2411 Mar 06 j 23:20	26° \approx 39'48	1°51'55
max. Earth dist.	-2419 Feb 17 j 14:29	8° \approx 43'59	30.86602 AU	max. Earth dist.	-2411 Mar 07 j 22:07	26° \approx 41'57	30.84149 AU
retrograde	-2419 Jun 04 j 04:07	11° \approx 16'28		retrograde	-2411 Jun 22 j 17:13	29° \approx 14'42	
opposition	-2419 Aug 23 j 13:00	9° \approx 51'01	-1°-37'00	opposition	-2411 Sep 10 j 11:26	27° \approx 49'17	-2°00'-48
min. Earth dist.	-2419 Aug 22 j 13:51	9° \approx 52'39	28.86506 AU	min. Earth dist.	-2411 Sep 09 j 14:30	27° \approx 50'46	28.84045 AU
direct	-2419 Nov 08 j 22:49	8° \approx 27'45		direct	-2411 Nov 26 j 19:44	26° \approx 25'44	
conjunction	-2418 Feb 19 j 02:28	10° \approx 56'01	-1°-32'-22	conjunction	-2410 Mar 09 j 12:50	28° \approx 54'42	-1°-54'00
minimum elong	-2418 Feb 19 j 02:28	10° \approx 56'01	1°32'25	minimum elong	-2410 Mar 09 j 12:50	28° \approx 54'42	1°54'03
max. Earth dist.	-2418 Feb 20 j 04:22	10° \approx 58'28	30.86225 AU	max. Earth dist.	-2410 Mar 10 j 10:36	28° \approx 56'45	30.83676 AU
retrograde	-2418 Jun 06 j 16:17	13° \approx 30'52			-2410 Apr 08 j 09:55	0° \approx X	
min. Earth dist.	-2418 Aug 25 j 00:57	12° \approx 07'06	28.86187 AU	retrograde	-2410 Jun 25 j 04:44	1° \approx X29'33	
opposition	-2418 Aug 26 j 00:51	12° \approx 05'26	-1°-40'-33	opposition	-2410 Sep 12 j 23:00	0° \approx X04'07	-2°-2'-59

Attention, astronomical year style is used: The year -2410 in astronomical counting style is the year 2411 BCE in historical counting style.

min. Earth dist.	-2410 Sep 12 j 03:27	0° 1 05'30	28.83605 AU	direct	-2402 Dec 17 j 02:51	16° 1 39'16	
	-2410 Sep 15 j 09:26	30° 1 00'00					
direct	-2410 Nov 29 j 06:07	28° 1 40'30		conjunction	-2401 Mar 30 j 17:32	19° 1 09'08	-2°-5'-6
	-2409 Feb 08 j 01:48	0° 1 00'00		minimum elong	-2401 Mar 30 j 17:32	19° 1 09'08	2°05'07
				max. Earth dist.	-2401 Mar 31 j 10:55	19° 1 10'45	30.83991 AU
conjunction	-2409 Mar 12 j 02:32	1° 1 09'32	-1°-55'-57	retrograde	-2401 Jul 16 j 02:31	21° 1 43'32	
minimum elong	-2409 Mar 12 j 02:32	1° 1 09'32	1°56'01	opposition	-2401 Oct 03 j 04:07	20° 1 18'24	-2°-13'-57
max. Earth dist.	-2409 Mar 13 j 00:52	1° 1 11'38	30.83266 AU	min. Earth dist.	-2401 Oct 02 j 13:07	20° 1 19'28	28.84253 AU
retrograde	-2409 Jun 27 j 16:52	3° 1 44'19		direct	-2401 Dec 19 j 13:36	18° 1 54'29	
opposition	-2409 Sep 15 j 10:21	2° 1 18'52	-2°-5'00				
min. Earth dist.	-2409 Sep 14 j 14:25	2° 1 20'17	28.83234 AU	conjunction	-2400 Apr 01 j 07:56	21° 1 24'25	-2°-5'-24
direct	-2409 Dec 01 j 18:17	0° 1 55'11		minimum elong	-2400 Apr 01 j 07:56	21° 1 24'25	2°05'25
				max. Earth dist.	-2400 Apr 02 j 01:06	21° 1 26'01	30.84171 AU
conjunction	-2408 Mar 13 j 16:05	3° 1 24'17	-1°-57'-45	retrograde	-2400 Jul 17 j 15:49	23° 1 58'42	
minimum elong	-2408 Mar 13 j 16:05	3° 1 24'17	1°57'47	opposition	-2400 Oct 04 j 15:07	22° 1 33'36	-2°-14'-10
max. Earth dist.	-2408 Mar 14 j 13:00	3° 1 26'15	30.82945 AU	min. Earth dist.	-2400 Oct 04 j 00:19	22° 1 34'39	28.84381 AU
retrograde	-2408 Jun 29 j 05:54	5° 1 59'02		direct	-2400 Dec 21 j 02:30	21° 1 09'37	
opposition	-2408 Sep 16 j 21:40	4° 1 33'35	-2°-6'-49				
min. Earth dist.	-2408 Sep 16 j 02:29	4° 1 34'57	28.82990 AU				
direct	-2408 Dec 03 j 03:29	3° 1 09'50					
conjunction	-2407 Mar 16 j 05:48	5° 1 39'02	-1°-59'-21				
minimum elong	-2407 Mar 16 j 05:48	5° 1 39'02	1°59'23				
max. Earth dist.	-2407 Mar 17 j 03:34	5° 1 41'04	30.82765 AU				
retrograde	-2407 Jul 01 j 17:22	8° 1 13'44					
opposition	-2407 Sep 19 j 08:56	6° 1 48'18	-2°-8'-26				
min. Earth dist.	-2407 Sep 18 j 13:47	6° 1 49'39	28.82884 AU				
direct	-2407 Dec 05 j 15:08	5° 1 24'30					
conjunction	-2406 Mar 18 j 19:20	7° 1 53'47	-2°00'-47				
minimum elong	-2406 Mar 18 j 19:20	7° 1 53'47	2°00'49				
max. Earth dist.	-2406 Mar 19 j 15:50	7° 1 55'42	30.82742 AU				
retrograde	-2406 Jul 04 j 07:13	10° 1 28'27					
opposition	-2406 Sep 21 j 20:14	9° 1 03'03	-2°-9'-51				
min. Earth dist.	-2406 Sep 21 j 01:10	9° 1 04'24	28.82941 AU				
direct	-2406 Dec 08 j 02:21	7° 1 39'13					
conjunction	-2405 Mar 21 j 09:14	10° 1 08'37	-2°-2'-1				
minimum elong	-2405 Mar 21 j 09:14	10° 1 08'37	2°02'03				
max. Earth dist.	-2405 Mar 22 j 06:16	10° 1 10'35	30.82861 AU				
retrograde	-2405 Jul 06 j 19:11	12° 1 43'14					
opposition	-2405 Sep 24 j 07:23	11° 1 17'53	-2°-11'-5				
min. Earth dist.	-2405 Sep 23 j 13:19	11° 1 19'10	28.83122 AU				
direct	-2405 Dec 10 j 13:44	9° 1 54'02					
conjunction	-2404 Mar 22 j 23:09	12° 1 23'34	-2°-3'-4				
minimum elong	-2404 Mar 22 j 23:09	12° 1 23'34	2°03'07				
max. Earth dist.	-2404 Mar 23 j 19:08	12° 1 25'26	30.83106 AU				
retrograde	-2404 Jul 08 j 10:06	14° 1 58'08					
opposition	-2404 Sep 25 j 18:32	13° 1 32'51	-2°-12'-6				
min. Earth dist.	-2404 Sep 25 j 00:13	13° 1 34'09	28.83409 AU				
direct	-2404 Dec 12 j 01:32	12° 1 09'00					
conjunction	-2403 Mar 25 j 13:02	14° 1 38'38	-2°-3'-56				
minimum elong	-2403 Mar 25 j 13:02	14° 1 38'38	2°03'58				
max. Earth dist.	-2403 Mar 26 j 08:37	14° 1 40'28	30.83409 AU				
retrograde	-2403 Jul 10 j 23:29	17° 1 13'11					
opposition	-2403 Sep 28 j 05:49	15° 1 47'57	-2°-12'-55				
min. Earth dist.	-2403 Sep 27 j 13:04	15° 1 49'08	28.83729 AU				
direct	-2403 Dec 14 j 13:40	14° 1 24'06					
conjunction	-2402 Mar 28 j 03:15	16° 1 53'51	-2°-4'-37				
minimum elong	-2402 Mar 28 j 03:15	16° 1 53'51	2°04'39				
max. Earth dist.	-2402 Mar 28 j 22:10	16° 1 55'37	30.83732 AU				
retrograde	-2402 Jul 13 j 13:59	19° 1 28'20					
opposition	-2402 Sep 30 j 16:52	18° 1 03'10	-2°-13'-32				
min. Earth dist.	-2402 Sep 29 j 23:59	18° 1 04'21	28.84028 AU				

Attention, astronomical year style is used: The year -2400 in astronomical counting style is the year 2401 BCE in historical counting style.

conjunction	-2400 Apr 01 j 07:56	21° ✕ 24'25	-2°-5'-24	direct	-2392 Jan 06 j 13:02	6° Υ 52'07	
minimum elong	-2400 Apr 01 j 07:56	21° ✕ 24'25	2°05'25				
max. Earth dist.	-2400 Apr 02 j 01:06	21° ✕ 26'01	30.84171 AU	conjunction	-2392 Apr 20 j 02:20	9° Υ 22'38	-2°00'-57
retrograde	-2400 Jul 17 j 15:49	23° ✕ 58'42		minimum elong	-2392 Apr 20 j 02:20	9° Υ 22'38	2°00'57
opposition	-2400 Oct 04 j 15:07	22° ✕ 33'36	-2°-14'-10	max. Earth dist.	-2392 Apr 20 j 12:36	9° Υ 23'36	30.86274 AU
min. Earth dist.	-2400 Oct 04 j 00:19	22° ✕ 34'39	28.84381 AU	retrograde	-2392 Aug 04 j 18:29	11° Υ 55'56	
direct	-2400 Dec 21 j 02:30	21° ✕ 09'37		opposition	-2392 Oct 22 j 05:21	10° Υ 31'08	-2°-8'-35
				min. Earth dist.	-2392 Oct 21 j 20:37	10° Υ 31'45	28.86771 AU
conjunction	-2399 Apr 03 j 22:12	23° ✕ 39'37	-2°-5'-30	direct	-2391 Jan 07 j 23:39	9° Υ 06'43	
minimum elong	-2399 Apr 03 j 22:12	23° ✕ 39'37	2°05'31				
max. Earth dist.	-2399 Apr 04 j 13:18	23° ✕ 41'02	30.84271 AU	conjunction	-2391 Apr 22 j 16:48	11° Υ 37'22	-1°-59'-32
retrograde	-2399 Jul 20 j 04:34	26° ✕ 13'47		minimum elong	-2391 Apr 22 j 16:48	11° Υ 37'22	1°59'32
opposition	-2399 Oct 07 j 02:11	24° ✕ 48'41	-2°-14'-10	max. Earth dist.	-2391 Apr 23 j 03:01	11° Υ 38'19	30.87013 AU
min. Earth dist.	-2399 Oct 06 j 12:42	24° ✕ 49'39	28.84463 AU	retrograde	-2391 Aug 07 j 08:22	14° Υ 10'33	
direct	-2399 Dec 23 j 12:38	23° ✕ 24'37		opposition	-2391 Oct 24 j 15:52	12° Υ 45'52	-2°-6'-59
				min. Earth dist.	-2391 Oct 24 j 07:17	12° Υ 46'28	28.87524 AU
conjunction	-2398 Apr 06 j 12:33	25° ✕ 54'40	-2°-5'-25	direct	-2390 Jan 10 j 12:31	11° Υ 21'28	
minimum elong	-2398 Apr 06 j 12:33	25° ✕ 54'40	2°05'26				
max. Earth dist.	-2398 Apr 07 j 03:50	25° ✕ 56'06	30.84337 AU	conjunction	-2390 Apr 25 j 07:12	13° Υ 52'14	-1°-57'-57
retrograde	-2398 Jul 22 j 15:14	28° ✕ 28'42		minimum elong	-2390 Apr 25 j 07:12	13° Υ 52'14	1°57'57
opposition	-2398 Oct 09 j 13:05	27° ✕ 03'37	-2°-13'-59	max. Earth dist.	-2390 Apr 25 j 15:24	13° Υ 53'00	30.87778 AU
min. Earth dist.	-2398 Oct 09 j 00:14	27° ✕ 04'32	28.84516 AU	retrograde	-2390 Aug 09 j 21:11	16° Υ 25'20	
direct	-2398 Dec 26 j 01:13	25° ✕ 39'28		opposition	-2390 Oct 27 j 02:33	15° Υ 00'44	-2°-5'-11
				min. Earth dist.	-2390 Oct 26 j 19:27	15° Υ 01'15	28.88280 AU
conjunction	-2397 Apr 09 j 02:52	28° ✕ 09'34	-2°-5'-8	direct	-2389 Jan 12 j 22:46	13° Υ 36'21	
minimum elong	-2397 Apr 09 j 02:52	28° ✕ 09'34	2°05'09				
max. Earth dist.	-2397 Apr 09 j 16:13	28° ✕ 10'49	30.84410 AU	conjunction	-2389 Apr 27 j 21:56	16° Υ 07'13	-1°-56'-11
	-2397 Jun 02 j 21:42	0° Υ		minimum elong	-2389 Apr 27 j 21:57	16° Υ 07'13	1°56'10
retrograde	-2397 Jul 25 j 03:46	0° Υ 43'27		max. Earth dist.	-2389 Apr 28 j 05:57	16° Υ 07'58	30.88504 AU
	-2397 Sep 16 j 11:19	30° ✕		retrograde	-2389 Aug 12 j 08:12	18° Υ 40'11	
opposition	-2397 Oct 11 j 23:49	29° ✕ 18'23	-2°-13'-35	opposition	-2389 Oct 29 j 13:07	17° Υ 15'42	-2°-3'-12
min. Earth dist.	-2397 Oct 11 j 11:32	29° ✕ 19'16	28.84613 AU	min. Earth dist.	-2389 Oct 29 j 07:00	17° Υ 16'08	28.88955 AU
direct	-2397 Dec 28 j 12:11	27° ✕ 54'09		direct	-2388 Jan 15 j 11:21	15° Υ 51'18	
	-2396 Mar 30 j 19:42	0° Υ					
conjunction	-2396 Apr 10 j 17:16	0° Υ 24'19	-2°-4'-41	conjunction	-2388 Apr 29 j 12:30	18° Υ 22'15	-1°-54'-14
minimum elong	-2396 Apr 10 j 17:16	0° Υ 24'19	2°04'42	minimum elong	-2388 Apr 29 j 12:30	18° Υ 22'15	1°54'14
max. Earth dist.	-2396 Apr 11 j 06:52	0° Υ 25'35	30.84534 AU	max. Earth dist.	-2388 Apr 29 j 18:02	18° Υ 22'46	30.89140 AU
retrograde	-2396 Jul 26 j 14:49	2° Υ 58'04		retrograde	-2388 Aug 13 j 20:50	20° Υ 55'05	
opposition	-2396 Oct 13 j 10:39	1° Υ 33'01	-2°-12'-59	opposition	-2388 Oct 30 j 23:49	19° Υ 30'40	-2°-1'-1
min. Earth dist.	-2396 Oct 12 j 23:32	1° Υ 33'48	28.84781 AU	min. Earth dist.	-2388 Oct 30 j 18:32	19° Υ 31'03	28.89541 AU
direct	-2396 Dec 29 j 23:30	0° Υ 08'42		direct	-2387 Jan 16 j 22:01	18° Υ 06'13	
conjunction	-2395 Apr 13 j 07:21	2° Υ 38'56	-2°-4'-2	conjunction	-2387 May 02 j 03:01	20° Υ 37'15	-1°-52'-7
minimum elong	-2395 Apr 13 j 07:21	2° Υ 38'56	2°04'02	minimum elong	-2387 May 02 j 03:02	20° Υ 37'15	1°52'06
max. Earth dist.	-2395 Apr 13 j 19:42	2° Υ 40'05	30.84769 AU	max. Earth dist.	-2387 May 02 j 08:22	20° Υ 37'45	30.89672 AU
retrograde	-2395 Jul 29 j 04:12	5° Υ 12'33		retrograde	-2387 Aug 16 j 07:36	23° Υ 09'56	
opposition	-2395 Oct 15 j 21:22	3° Υ 47'32	-2°-12'-12	opposition	-2387 Nov 02 j 10:30	21° Υ 45'34	-1°-58'-40
min. Earth dist.	-2395 Oct 15 j 09:58	3° Υ 48'21	28.85078 AU	min. Earth dist.	-2387 Nov 02 j 06:53	21° Υ 45'50	28.90016 AU
direct	-2394 Jan 01 j 11:41	2° Υ 23'10		direct	-2386 Jan 19 j 08:58	20° Υ 21'04	
conjunction	-2394 Apr 15 j 21:40	4° Υ 53'29	-2°-3'-11	conjunction	-2386 May 04 j 17:32	22° Υ 52'09	-1°-49'-50
minimum elong	-2394 Apr 15 j 21:40	4° Υ 53'29	2°03'12	minimum elong	-2386 May 04 j 17:33	22° Υ 52'09	1°49'50
max. Earth dist.	-2394 Apr 16 j 09:43	4° Υ 54'36	30.85127 AU	max. Earth dist.	-2386 May 04 j 20:51	22° Υ 52'27	30.90122 AU
retrograde	-2394 Jul 31 j 16:14	7° Υ 26'59		retrograde	-2386 Aug 18 j 19:34	25° Υ 24'39	
opposition	-2394 Oct 18 j 08:03	6° Υ 02'01	-2°-11'-11	opposition	-2386 Nov 04 j 20:51	24° Υ 00'19	-1°-56'-9
min. Earth dist.	-2394 Oct 17 j 22:08	6° Υ 02'43	28.85511 AU	min. Earth dist.	-2386 Nov 04 j 17:32	24° Υ 00'33	28.90429 AU
direct	-2393 Jan 03 j 23:45	4° Υ 37'37		direct	-2385 Jan 21 j 21:33	22° Υ 35'44	
conjunction	-2393 Apr 18 j 12:04	7° Υ 08'02	-2°-2'-10	conjunction	-2385 May 07 j 08:07	25° Υ 06'52	-1°-47'-24
minimum elong	-2393 Apr 18 j 12:04	7° Υ 08'02	2°02'10	minimum elong	-2385 May 07 j 08:07	25° Υ 06'52	1°47'23
max. Earth dist.	-2393 Apr 18 j 23:24	7° Υ 09'05	30.85642 AU	max. Earth dist.	-2385 May 07 j 10:45	25° Υ 07'06	30.90512 AU
retrograde	-2393 Aug 03 j 05:57	9° Υ 41'25		retrograde	-2385 Aug 21 j 06:09	27° Υ 39'11	
opposition	-2393 Oct 20 j 18:39	8° Υ 16'32	-2°-9'-59	opposition	-2385 Nov 07 j 07:24	26° Υ 14'53	-1°-53'-27
min. Earth dist.	-2393 Oct 20 j 08:19	8° Υ 17'16	28.86083 AU	min. Earth dist.	-2385 Nov 07 j 05:57	26° Υ 14'59	28.90809 AU
				direct	-2384 Jan 24 j 10:02	24° Υ 50'12	

Attention, astronomical year style is used: The year -2384 in astronomical counting style is the year 2385 BCE in historical counting style.

conjunction	-2384 May 08 j 22:24	27° Υ 21'22	-1°-44'-48	direct	-2376 Feb 11 j 10:45	12° C 41'24	
minimum elong	-2384 May 08 j 22:24	27° Υ 21'22	1°44'47		-2376 May 21 j 19:06	15° C	
max. Earth dist.	-2384 May 08 j 23:54	27° Υ 21'31	30.90908 AU				
retrograde	-2384 Aug 22 j 18:36	29° Υ 53'30		conjunction	-2376 May 27 j 15:49	15° C 13'03	-1°-18'-43
opposition	-2384 Nov 08 j 17:40	28° Υ 29'13	-1°-50'-35	minimum elong	-2376 May 27 j 15:50	15° C 13'03	1°18'41
min. Earth dist.	-2384 Nov 08 j 16:01	28° Υ 29'20	28.91213 AU	max. Earth dist.	-2376 May 27 j 10:21	15° C 12'32	30.97144 AU
direct	-2383 Jan 25 j 23:30	27° Υ 04'28		retrograde	-2376 Sep 09 j 14:30	17° C 43'51	
				opposition	-2376 Nov 26 j 03:54	16° C 20'12	-1°-22'-6
conjunction	-2383 May 11 j 12:39	29° Υ 35'40	-1°-42'-2	min. Earth dist.	-2376 Nov 26 j 09:42	16° C 19'47	28.97631 AU
minimum elong	-2383 May 11 j 12:39	29° Υ 35'40	1°42'01		-2375 Jan 27 j 00:34	15° R C	
max. Earth dist.	-2383 May 11 j 13:02	29° Υ 35'42	30.91344 AU	direct	-2375 Feb 12 j 22:13	14° C 55'14	
	-2383 May 22 j 11:20	0° C			-2375 Mar 01 j 20:36	15° C	
retrograde	-2383 Aug 25 j 06:16	2° C 07'36					
opposition	-2383 Nov 11 j 03:59	0° C 43'21	-1°-47'-33	conjunction	-2375 May 30 j 05:55	17° C 26'57	-1°-14'-52
min. Earth dist.	-2383 Nov 11 j 04:00	0° C 43'21	28.91697 AU	minimum elong	-2375 May 30 j 05:56	17° C 26'57	1°14'50
	-2383 Dec 07 j 19:52	30° R Υ		max. Earth dist.	-2375 May 29 j 22:52	17° C 26'17	30.97980 AU
direct	-2382 Jan 28 j 10:53	29° Υ 18'31		retrograde	-2375 Sep 12 j 02:36	19° C 57'35	
	-2382 Mar 20 j 04:59	0° C		opposition	-2375 Nov 28 j 14:03	18° C 34'00	-1°-17'-56
				min. Earth dist.	-2375 Nov 28 j 19:57	18° C 33'35	28.98408 AU
conjunction	-2382 May 14 j 02:56	1° C 49'46	-1°-39'-8	direct	-2374 Feb 15 j 11:06	17° C 09'00	
minimum elong	-2382 May 14 j 02:56	1° C 49'46	1°39'07				
max. Earth dist.	-2382 May 14 j 03:09	1° C 49'47	30.91887 AU	conjunction	-2374 Jun 01 j 20:01	19° C 40'46	-1°-10'-55
retrograde	-2382 Aug 27 j 19:08	4° C 21'30		minimum elong	-2374 Jun 01 j 20:01	19° C 40'46	1°10'54
opposition	-2382 Nov 13 j 14:14	2° C 57'18	-1°-44'-22	max. Earth dist.	-2374 Jun 01 j 11:33	19° C 39'59	30.98708 AU
min. Earth dist.	-2382 Nov 13 j 14:13	2° C 57'18	28.92283 AU	retrograde	-2374 Sep 14 j 13:45	22° C 11'14	
direct	-2381 Jan 31 j 01:09	1° C 32'25		opposition	-2374 Dec 01 j 00:25	20° C 47'42	-1°-13'-40
				min. Earth dist.	-2374 Dec 01 j 08:15	20° C 47'09	28.99095 AU
conjunction	-2381 May 16 j 17:05	4° C 03'42	-1°-36'-4	direct	-2373 Feb 17 j 22:47	19° C 22'39	
minimum elong	-2381 May 16 j 17:05	4° C 03'42	1°36'02				
max. Earth dist.	-2381 May 16 j 15:39	4° C 03'34	30.92541 AU	conjunction	-2373 Jun 04 j 10:01	21° C 54'27	-1°-6'-52
retrograde	-2381 Aug 30 j 06:51	6° C 35'16		minimum elong	-2373 Jun 04 j 10:01	21° C 54'27	1°06'49
opposition	-2381 Nov 16 j 00:29	5° C 11'07	-1°-41'-1	max. Earth dist.	-2373 Jun 04 j 00:57	21° C 53'36	30.99367 AU
min. Earth dist.	-2381 Nov 16 j 01:30	5° C 11'03	28.93009 AU	retrograde	-2373 Sep 17 j 01:50	24° C 24'43	
direct	-2380 Feb 02 j 12:26	3° C 46'12		opposition	-2373 Dec 03 j 10:33	23° C 01'15	-1°-9'-17
				min. Earth dist.	-2373 Dec 03 j 18:43	23° C 00'40	28.99714 AU
conjunction	-2380 May 18 j 07:20	6° C 17'33	-1°-32'-52	direct	-2372 Feb 20 j 13:23	21° C 36'09	
minimum elong	-2380 May 18 j 07:20	6° C 17'33	1°32'52				
max. Earth dist.	-2380 May 18 j 06:11	6° C 17'27	30.93339 AU	conjunction	-2372 Jun 05 j 23:47	24° C 07'57	-1°-2'-43
retrograde	-2380 Aug 31 j 17:52	8° C 48'57		minimum elong	-2372 Jun 05 j 23:48	24° C 07'57	1°02'41
opposition	-2380 Nov 17 j 10:46	7° C 24'53	-1°-37'-31	max. Earth dist.	-2372 Jun 05 j 12:57	24° C 06'57	30.99981 AU
min. Earth dist.	-2380 Nov 17 j 12:16	7° C 24'47	28.93858 AU	retrograde	-2372 Sep 18 j 13:08	26° C 38'03	
direct	-2379 Feb 04 j 01:05	5° C 59'57		opposition	-2372 Dec 04 j 20:46	25° C 14'37	-1°-4'-48
				min. Earth dist.	-2372 Dec 05 j 06:05	25° C 13'57	29.00334 AU
conjunction	-2379 May 20 j 21:14	8° C 31'22	-1°-29'-32	direct	-2371 Feb 22 j 01:05	23° C 49'27	
minimum elong	-2379 May 20 j 21:15	8° C 31'22	1°29'30				
max. Earth dist.	-2379 May 20 j 18:11	8° C 31'05	30.94258 AU	conjunction	-2371 Jun 08 j 13:26	26° C 21'17	0°-58'-29
retrograde	-2379 Sep 03 j 06:30	11° C 02'37		minimum elong	-2371 Jun 08 j 13:26	26° C 21'17	0°58'26
opposition	-2379 Nov 19 j 20:59	9° C 38'39	-1°-33'-52	max. Earth dist.	-2371 Jun 08 j 02:48	26° C 20'18	31.00613 AU
min. Earth dist.	-2379 Nov 19 j 23:00	9° C 38'31	28.94816 AU	retrograde	-2371 Sep 20 j 23:47	28° C 51'11	
direct	-2378 Feb 06 j 11:48	8° C 13'43		opposition	-2371 Dec 07 j 06:54	27° C 27'47	-1°00'-14
				min. Earth dist.	-2371 Dec 07 j 16:53	27° C 27'05	29.00975 AU
conjunction	-2378 May 23 j 11:32	10° C 45'13	-1°-26'-3	direct	-2370 Feb 24 j 14:27	26° C 02'35	
minimum elong	-2378 May 23 j 11:32	10° C 45'13	1°26'02				
max. Earth dist.	-2378 May 23 j 08:37	10° C 44'57	30.95241 AU	conjunction	-2370 Jun 11 j 02:57	28° C 34'25	0°-54'-10
retrograde	-2378 Sep 05 j 16:40	13° C 16'19		minimum elong	-2370 Jun 11 j 02:57	28° C 34'25	0°54'08
opposition	-2378 Nov 22 j 07:12	11° C 52'29	-1°-30'-5	max. Earth dist.	-2370 Jun 10 j 14:24	28° C 33'16	31.01296 AU
min. Earth dist.	-2378 Nov 22 j 10:50	11° C 52'13	28.95799 AU		-2370 Jul 21 j 21:00	0° II	
direct	-2377 Feb 08 j 22:42	10° C 27'33		retrograde	-2370 Sep 23 j 12:03	1° II 04'08	
					-2370 Nov 28 j 06:42	30° R C	
conjunction	-2377 May 26 j 01:43	12° C 59'07	-1°-22'-26	opposition	-2370 Dec 09 j 16:56	29° C 40'48	0°-55'-35
minimum elong	-2377 May 26 j 01:43	12° C 59'07	1°22'24	min. Earth dist.	-2370 Dec 10 j 03:12	29° C 40'04	29.01708 AU
max. Earth dist.	-2377 May 25 j 20:48	12° C 58'40	30.96228 AU	direct	-2369 Feb 27 j 02:00	28° C 15'32	
	-2377 Jul 27 j 13:21	15° C			-2369 May 23 j 00:58	0° II	
retrograde	-2377 Sep 08 j 04:25	15° C 30'05					
	-2377 Oct 21 j 10:55	15° R C		conjunction	-2369 Jun 13 j 16:31	0° II 47'24	0°-49'-47
opposition	-2377 Nov 24 j 17:28	14° C 06'20	-1°-26'-9	minimum elong	-2369 Jun 13 j 16:31	0° II 47'24	0°49'44
min. Earth dist.	-2377 Nov 24 j 21:19	14° C 06'04	28.96758 AU	max. Earth dist.	-2369 Jun 13 j 04:28	0° II 46'18	31.02079 AU

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Attention, astronomical year style is used: The year -2369 in astronomical counting style is the year 2370 BCE in historical counting style.

retrograde	-2369 Sep 25 j 21:16	3°II16'57		opposition	-2361 Dec 29 j 13:09	19°II35'55	0°-10'-55
opposition	-2369 Dec 12 j 03:10	1°II53'40	0°-50'-51	min. Earth dist.	-2361 Dec 30 j 05:45	19°II34'46	29.10792 AU
min. Earth dist.	-2369 Dec 12 j 14:34	1°II52'52	29.02548 AU	direct	-2360 Mar 18 j 14:26	18°II10'37	
direct	-2368 Feb 29 j 13:31	0°II28'24					
				conjunction	-2360 Jul 03 j 14:54	20°II42'41	0°-7'-50
conjunction	-2368 Jun 15 j 05:38	3°II00'16	0°-45'-19	minimum elong	-2360 Jul 03 j 14:54	20°II42'41	0°07'48
minimum elong	-2368 Jun 15 j 05:38	3°II00'17	0°45'17	behind sun begin	-2360 Jul 03 j 09:00	20°II42'09	
max. Earth dist.	-2368 Jun 14 j 16:12	2°II59'02	31.02998 AU	behind sun end	-2360 Jul 03 j 20:48	20°II43'12	
retrograde	-2368 Sep 27 j 07:48	5°II29'39		max. Earth dist.	-2360 Jul 02 j 19:47	20°II40'55	31.11143 AU
opposition	-2368 Dec 13 j 13:16	4°II06'28	0°-46'-2	retrograde	-2360 Oct 14 j 21:32	23°II10'53	
min. Earth dist.	-2368 Dec 14 j 00:14	4°II05'42	29.03533 AU	opposition	-2360 Dec 30 j 23:35	21°II48'18	0°-5'-47
direct	-2367 Mar 03 j 01:19	2°II41'11		min. Earth dist.	-2360 Dec 31 j 17:36	21°II47'02	29.11518 AU
				direct	-2359 Mar 21 j 03:03	20°II22'58	
conjunction	-2367 Jun 17 j 19:00	5°II13'07	0°-40'-47	max. Earth dist.	-2359 Jul 05 j 06:51	22°II53'04	31.11856 AU
minimum elong	-2367 Jun 17 j 19:00	5°II13'07	0°40'45				
max. Earth dist.	-2367 Jun 17 j 05:43	5°II11'53	31.04044 AU	conjunction	-2359 Jul 06 j 03:35	22°II54'59	0°-3'-3
retrograde	-2367 Sep 29 j 17:12	7°II42'21		minimum elong	-2359 Jul 06 j 03:34	22°II54'59	0°03'00
opposition	-2367 Dec 15 j 23:23	6°II19'15	0°-41'-10	behind sun begin	-2359 Jul 05 j 21:01	22°II54'24	
min. Earth dist.	-2367 Dec 16 j 11:52	6°II18'23	29.04634 AU	behind sun end	-2359 Jul 06 j 10:06	22°II55'34	
direct	-2366 Mar 05 j 11:33	4°II53'59		retrograde	-2359 Oct 17 j 08:06	25°II23'00	
				opposition	-2358 Jan 02 j 09:42	24°II00'28	0°00'-40
conjunction	-2366 Jun 20 j 08:16	7°II25'57	0°-36'-11	min. Earth dist.	-2358 Jan 03 j 03:29	23°II59'13	29.12222 AU
minimum elong	-2366 Jun 20 j 08:16	7°II25'57	0°36'10	asc. node	-2358 Feb 19 j 20:29	22°II50'58	
max. Earth dist.	-2366 Jun 19 j 17:55	7°II24'37	31.05198 AU	direct	-2358 Mar 23 j 15:16	22°II35'05	
retrograde	-2366 Oct 02 j 04:32	9°II55'03					
opposition	-2366 Dec 18 j 09:29	8°II32'05	0°-36'-14	conjunction	-2358 Jul 08 j 16:16	25°II07'05	0°01'52
min. Earth dist.	-2366 Dec 18 j 21:40	8°II31'13	29.05801 AU	minimum elong	-2358 Jul 08 j 16:16	25°II07'05	0°01'55
direct	-2365 Mar 07 j 23:12	7°II06'49		behind sun begin	-2358 Jul 08 j 09:42	25°II06'30	
				behind sun end	-2358 Jul 08 j 22:50	25°II07'40	
conjunction	-2365 Jun 22 j 21:31	9°II38'50	0°-31'-33	max. Earth dist.	-2358 Jul 07 j 19:44	25°II05'11	31.12555 AU
minimum elong	-2365 Jun 22 j 21:31	9°II38'50	0°31'30	retrograde	-2358 Oct 19 j 17:08	27°II34'57	
max. Earth dist.	-2365 Jun 22 j 06:20	9°II37'26	31.06370 AU	opposition	-2357 Jan 04 j 20:10	26°II12'26	0°04'27
retrograde	-2365 Oct 04 j 14:47	12°II07'49		min. Earth dist.	-2357 Jan 05 j 15:22	26°II11'06	29.12943 AU
opposition	-2365 Dec 20 j 19:48	10°II44'57	0°-31'-14	direct	-2357 Mar 26 j 02:07	24°II47'01	
min. Earth dist.	-2365 Dec 21 j 09:38	10°II43'58	29.06973 AU	max. Earth dist.	-2357 Jul 10 j 07:20	27°II17'02	31.13306 AU
direct	-2364 Mar 09 j 10:41	9°II19'43					
				conjunction	-2357 Jul 11 j 04:36	27°II19'00	0°06'40
conjunction	-2364 Jun 24 j 10:45	11°II51'46	0°-26'-51	minimum elong	-2357 Jul 11 j 04:35	27°II19'00	0°06'44
minimum elong	-2364 Jun 24 j 10:45	11°II51'46	0°26'49	behind sun begin	-2357 Jul 10 j 22:28	27°II18'27	
max. Earth dist.	-2364 Jun 23 j 19:07	11°II50'19	31.07522 AU	behind sun end	-2357 Jul 11 j 10:42	27°II19'32	
retrograde	-2364 Oct 06 j 02:08	14°II20'36		retrograde	-2357 Oct 22 j 03:21	29°II46'43	
opposition	-2364 Dec 22 j 06:03	12°II57'49	0°-26'-12	opposition	-2356 Jan 07 j 06:29	28°II24'15	0°09'34
min. Earth dist.	-2364 Dec 22 j 20:10	12°II56'49	29.08082 AU	min. Earth dist.	-2356 Jan 08 j 00:57	28°II22'58	29.13730 AU
direct	-2363 Mar 12 j 00:30	11°II32'35		direct	-2356 Mar 27 j 14:05	26°II58'49	
conjunction	-2363 Jun 26 j 23:50	14°II04'40	0°-22'-8	conjunction	-2356 Jul 12 j 16:53	29°II30'47	0°11'25
minimum elong	-2363 Jun 26 j 23:50	14°II04'40	0°22'04	minimum elong	-2356 Jul 12 j 16:54	29°II30'47	0°11'28
max. Earth dist.	-2363 Jun 26 j 06:30	14°II03'04	31.08583 AU	behind sun begin	-2356 Jul 12 j 12:12	29°II30'22	
retrograde	-2363 Oct 08 j 13:33	16°II33'22		behind sun end	-2356 Jul 12 j 21:35	29°II31'12	
opposition	-2363 Dec 24 j 16:26	15°II10'38	0°-21'-7	max. Earth dist.	-2356 Jul 11 j 19:21	29°II28'47	31.14136 AU
min. Earth dist.	-2363 Dec 25 j 07:45	15°II09'34	29.09098 AU		-2356 Jul 25 j 21:17	0°☾	
direct	-2362 Mar 14 j 11:57	13°II45'24		retrograde	-2356 Oct 23 j 12:51	1°☾58'23	
				opposition	-2355 Jan 08 j 16:54	0°☾35'58	0°14'39
conjunction	-2362 Jun 29 j 13:05	16°II17'29	0°-17'-22	min. Earth dist.	-2355 Jan 09 j 12:25	0°☾34'37	29.14628 AU
minimum elong	-2362 Jun 29 j 13:05	16°II17'29	0°17'20		-2355 Jan 30 j 20:43	30°☾II	
max. Earth dist.	-2362 Jun 28 j 19:42	16°II15'53	31.09539 AU	direct	-2355 Mar 30 j 01:03	29°II10'33	
retrograde	-2362 Oct 11 j 00:19	18°II46'01			-2355 May 25 j 17:07	0°☾	
opposition	-2362 Dec 27 j 02:46	17°II23'22	0°-16'-2	max. Earth dist.	-2355 Jul 14 j 07:43	1°☾40'32	31.15091 AU
min. Earth dist.	-2362 Dec 27 j 18:59	17°II22'13	29.09988 AU				
direct	-2361 Mar 17 j 01:48	15°II58'06		conjunction	-2355 Jul 15 j 05:06	1°☾42'31	0°16'10
max. Earth dist.	-2361 Jul 01 j 06:36	18°II28'23	31.10384 AU	minimum elong	-2355 Jul 15 j 05:06	1°☾42'31	0°16'14
				retrograde	-2355 Oct 25 j 23:20	4°☾10'01	
conjunction	-2361 Jul 02 j 02:04	18°II30'10	0°-12'-36	opposition	-2354 Jan 11 j 03:19	2°☾47'41	0°19'44
minimum elong	-2361 Jul 02 j 02:04	18°II30'10	0°12'33	min. Earth dist.	-2354 Jan 11 j 22:32	2°☾46'20	29.15619 AU
behind sun begin	-2361 Jul 01 j 21:56	18°II29'48		direct	-2354 Apr 01 j 14:00	1°☾22'17	
behind sun end	-2361 Jul 02 j 06:13	18°II30'32					
retrograde	-2361 Oct 13 j 12:38	20°II58'32		conjunction	-2354 Jul 17 j 17:14	3°☾54'16	0°20'54

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Attention, astronomical year style is used: The year -2354 in astronomical counting style is the year 2355 BCE in historical counting style.

minimum elong	-2354 Jul 17 j 17:14	3° $\overline{54}$ '16	0°20'57	opposition	-2345 Jan 31 j 03:42	22° $\overline{33}$ '53	1°03'09
max. Earth dist.	-2354 Jul 16 j 18:53	3° $\overline{52}$ '12	31.16121 AU	min. Earth dist.	-2345 Feb 01 j 02:58	22° $\overline{32}$ '17	29.22557 AU
retrograde	-2354 Oct 28 j 10:30	6° $\overline{21}$ '42		direct	-2345 Apr 22 j 02:56	21° $\overline{08}$ '35	
opposition	-2353 Jan 13 j 13:44	4° $\overline{59}$ '27	0°24'47	max. Earth dist.	-2345 Aug 06 j 01:16	23° $\overline{37}$ '55	31.22709 AU
min. Earth dist.	-2353 Jan 14 j 09:32	4° $\overline{58}$ '05	29.16689 AU				
direct	-2353 Apr 04 j 00:27	3° $\overline{34}$ '06		conjunction	-2345 Aug 07 j 03:10	23° $\overline{40}$ '19	1°01'15
max. Earth dist.	-2353 Jul 19 j 07:43	6° $\overline{04}$ '06	31.17203 AU	minimum elong	-2345 Aug 07 j 03:10	23° $\overline{40}$ '19	1°01'19
				retrograde	-2345 Nov 17 j 06:01	26° $\overline{06}$ '56	
conjunction	-2353 Jul 20 j 05:25	6° $\overline{06}$ '07	0°25'36	opposition	-2344 Feb 02 j 14:37	24° $\overline{45}$ '01	1°07'36
minimum elong	-2353 Jul 20 j 05:24	6° $\overline{06}$ '07	0°25'40	min. Earth dist.	-2344 Feb 03 j 14:01	24° $\overline{43}$ '24	29.23007 AU
retrograde	-2353 Oct 30 j 21:21	8° $\overline{33}$ '28		direct	-2344 Apr 23 j 13:23	23° $\overline{19}$ '41	
opposition	-2352 Jan 16 j 00:24	7° $\overline{11}$ '20	0°29'47				
min. Earth dist.	-2352 Jan 16 j 20:42	7° $\overline{09}$ '55	29.17763 AU	conjunction	-2344 Aug 08 j 14:14	25° $\overline{51}$ '21	1°05'22
direct	-2352 Apr 05 j 13:56	5° $\overline{46}$ '02		minimum elong	-2344 Aug 08 j 14:13	25° $\overline{51}$ '21	1°05'24
				max. Earth dist.	-2344 Aug 07 j 13:30	25° $\overline{49}$ '03	31.23181 AU
conjunction	-2352 Jul 21 j 17:14	8° $\overline{18}$ '03	0°30'16	retrograde	-2344 Nov 18 j 15:42	28° $\overline{17}$ '53	
minimum elong	-2352 Jul 21 j 17:14	8° $\overline{18}$ '03	0°30'19	opposition	-2343 Feb 04 j 01:33	26° $\overline{55}$ '58	1°11'56
max. Earth dist.	-2352 Jul 20 j 18:00	8° $\overline{15}$ '54	31.18259 AU	min. Earth dist.	-2343 Feb 05 j 00:57	26° $\overline{54}$ '21	29.23518 AU
retrograde	-2352 Nov 01 j 10:02	10° $\overline{45}$ '21		direct	-2343 Apr 26 j 03:06	25° $\overline{30}$ '38	
opposition	-2351 Jan 17 j 10:59	9° $\overline{23}$ '17	0°34'45	max. Earth dist.	-2343 Aug 09 j 23:31	27° $\overline{59}$ '51	31.23740 AU
min. Earth dist.	-2351 Jan 18 j 07:21	9° $\overline{21}$ '52	29.18796 AU				
direct	-2351 Apr 08 j 02:28	7° $\overline{58}$ '02		conjunction	-2343 Aug 11 j 01:12	28° $\overline{02}$ '14	1°09'22
max. Earth dist.	-2351 Jul 23 j 06:35	10° $\overline{27}$ '58	31.19232 AU	minimum elong	-2343 Aug 11 j 01:11	28° $\overline{02}$ '14	1°09'25
					-2343 Oct 10 j 20:28	0° $\overline{0}$	
conjunction	-2351 Jul 24 j 05:21	10° $\overline{30}$ '04	0°34'53	retrograde	-2343 Nov 21 j 03:33	0° $\overline{28}$ '42	
minimum elong	-2351 Jul 24 j 05:21	10° $\overline{30}$ '04	0°34'57		-2342 Jan 02 j 12:56	30° $\overline{0}$	
retrograde	-2351 Nov 03 j 19:13	12° $\overline{57}$ '17		opposition	-2342 Feb 06 j 12:19	29° $\overline{06}$ '48	1°16'10
opposition	-2350 Jan 19 j 21:40	11° $\overline{35}$ '18	0°39'40	min. Earth dist.	-2342 Feb 07 j 11:02	29° $\overline{05}$ '14	29.24138 AU
min. Earth dist.	-2350 Jan 20 j 19:27	11° $\overline{33}$ '47	29.19713 AU	direct	-2342 Apr 28 j 15:08	27° $\overline{41}$ '29	
direct	-2350 Apr 10 j 15:01	10° $\overline{10}$ '04			-2342 Aug 07 j 16:00	0° $\overline{0}$	
				max. Earth dist.	-2342 Aug 12 j 11:51	0° $\overline{10}$ '47	31.24401 AU
conjunction	-2350 Jul 26 j 17:17	12° $\overline{42}$ '06	0°39'28				
minimum elong	-2350 Jul 26 j 17:17	12° $\overline{42}$ '06	0°39'30	conjunction	-2342 Aug 13 j 12:16	0° $\overline{13}$ '03	1°13'17
max. Earth dist.	-2350 Jul 25 j 16:59	12° $\overline{39}$ '51	31.20087 AU	minimum elong	-2342 Aug 13 j 12:16	0° $\overline{13}$ '03	1°13'19
retrograde	-2350 Nov 06 j 06:15	15° $\overline{09}$ '13		retrograde	-2342 Nov 23 j 12:43	2° $\overline{39}$ '29	
opposition	-2349 Jan 22 j 08:25	13° $\overline{47}$ '17	0°44'31	opposition	-2341 Feb 08 j 23:25	1° $\overline{17}$ '37	1°20'17
min. Earth dist.	-2349 Jan 23 j 05:51	13° $\overline{45}$ '48	29.20504 AU	min. Earth dist.	-2341 Feb 09 j 22:49	1° $\overline{16}$ '01	29.24841 AU
direct	-2349 Apr 13 j 03:34	12° $\overline{22}$ '04			-2341 Apr 09 j 02:25	30° $\overline{0}$	
max. Earth dist.	-2349 Jul 28 j 05:02	14° $\overline{51}$ '50	31.20796 AU	direct	-2341 May 01 j 03:17	29° $\overline{52}$ '22	
					-2341 May 22 j 22:44	0° $\overline{0}$	
conjunction	-2349 Jul 29 j 05:09	14° $\overline{54}$ '05	0°43'58				
minimum elong	-2349 Jul 29 j 05:08	14° $\overline{54}$ '05	0°44'01	conjunction	-2341 Aug 15 j 22:57	2° $\overline{23}$ '53	1°17'05
retrograde	-2349 Nov 08 j 15:49	17° $\overline{21}$ '06		minimum elong	-2341 Aug 15 j 22:57	2° $\overline{23}$ '53	1°17'08
opposition	-2348 Jan 24 j 19:21	15° $\overline{59}$ '12	0°49'18	max. Earth dist.	-2341 Aug 14 j 21:54	2° $\overline{21}$ '33	31.25139 AU
min. Earth dist.	-2348 Jan 25 j 18:16	15° $\overline{57}$ '37	29.21157 AU	retrograde	-2341 Nov 26 j 00:04	4° $\overline{50}$ '18	
direct	-2348 Apr 14 j 14:54	14° $\overline{33}$ '59		opposition	-2340 Feb 11 j 10:26	3° $\overline{28}$ '29	1°24'17
				min. Earth dist.	-2340 Feb 12 j 08:47	3° $\overline{26}$ '57	29.25598 AU
conjunction	-2348 Jul 30 j 16:51	17° $\overline{05}$ '56	0°48'24	direct	-2340 May 02 j 15:53	2° $\overline{03}$ '17	
minimum elong	-2348 Jul 30 j 16:51	17° $\overline{05}$ '56	0°48'27	max. Earth dist.	-2340 Aug 16 j 09:34	4° $\overline{32}$ '32	31.25887 AU
max. Earth dist.	-2348 Jul 29 j 15:52	17° $\overline{03}$ '37	31.21390 AU				
retrograde	-2348 Nov 10 j 01:30	19° $\overline{32}$ '51		conjunction	-2340 Aug 17 j 09:50	4° $\overline{34}$ '48	1°20'46
opposition	-2347 Jan 26 j 06:01	18° $\overline{10}$ '58	0°54'00	minimum elong	-2340 Aug 17 j 09:50	4° $\overline{34}$ '48	1°20'49
min. Earth dist.	-2347 Jan 27 j 04:25	18° $\overline{09}$ '25	29.21693 AU	retrograde	-2340 Nov 27 j 10:04	7° $\overline{01}$ '11	
direct	-2347 Apr 17 j 03:19	16° $\overline{45}$ '44		opposition	-2339 Feb 12 j 21:32	5° $\overline{39}$ '26	1°28'10
max. Earth dist.	-2347 Aug 01 j 03:02	19° $\overline{15}$ '15	31.21871 AU	min. Earth dist.	-2339 Feb 13 j 20:59	5° $\overline{37}$ '49	29.26345 AU
				direct	-2339 May 05 j 03:15	4° $\overline{14}$ '17	
conjunction	-2347 Aug 02 j 04:28	19° $\overline{17}$ '37	0°52'46				
minimum elong	-2347 Aug 02 j 04:28	19° $\overline{17}$ '37	0°52'50	conjunction	-2339 Aug 19 j 20:35	6° $\overline{45}$ '46	1°24'21
retrograde	-2347 Nov 12 j 10:11	21° $\overline{44}$ '26		minimum elong	-2339 Aug 19 j 20:35	6° $\overline{45}$ '46	1°24'24
opposition	-2346 Jan 28 j 16:54	20° $\overline{22}$ '32	0°58'37	max. Earth dist.	-2339 Aug 18 j 19:57	6° $\overline{43}$ '28	31.26603 AU
min. Earth dist.	-2346 Jan 29 j 16:28	20° $\overline{20}$ '55	29.22148 AU	retrograde	-2339 Nov 29 j 20:02	9° $\overline{12}$ '10	
direct	-2346 Apr 19 j 14:28	18° $\overline{57}$ '16		opposition	-2338 Feb 15 j 08:43	7° $\overline{50}$ '27	1°31'56
				min. Earth dist.	-2338 Feb 16 j 07:19	7° $\overline{48}$ '54	29.27016 AU
conjunction	-2346 Aug 04 j 15:56	21° $\overline{29}$ '05	0°57'03	direct	-2338 May 07 j 15:45	6° $\overline{25}$ '22	
minimum elong	-2346 Aug 04 j 15:55	21° $\overline{29}$ '05	0°57'07	max. Earth dist.	-2338 Aug 21 j 06:29	8° $\overline{54}$ '30	31.27210 AU
max. Earth dist.	-2346 Aug 03 j 14:43	21° $\overline{26}$ '44	31.22297 AU				
retrograde	-2346 Nov 14 j 19:22	23° $\overline{55}$ '47		conjunction	-2338 Aug 22 j 07:19	8° $\overline{56}$ '49	1°27'48

Attention, astronomical year style is used: The year -2338 in astronomical counting style is the year 2339 BCE in historical counting style.

minimum elong	-2338 Aug 22 j 07:19	8°056'49	1°27'51	max. Earth dist.	-2330 Sep 07 j 19:00	26°021'00	31.29167 AU
retrograde	-2338 Dec 02 j 05:24	11°023'13		retrograde	-2330 Dec 19 j 15:32	28°049'28	
opposition	-2337 Feb 17 j 20:09	10°001'32	1°35'33	opposition	-2329 Mar 07 j 16:11	27°027'39	1°59'09
min. Earth dist.	-2337 Feb 18 j 19:39	9°059'55	29.27582 AU	min. Earth dist.	-2329 Mar 08 j 12:46	27°026'15	29.29486 AU
direct	-2337 May 10 j 02:16	8°036'29		direct	-2329 May 28 j 03:52	26°002'47	
				max. Earth dist.	-2329 Sep 10 j 05:18	28°023'31	31.29555 AU
conjunction	-2337 Aug 24 j 18:02	11°007'54	1°31'08				
minimum elong	-2337 Aug 24 j 18:01	11°007'54	1°31'10	conjunction	-2329 Sep 11 j 03:16	28°023'34	1°52'38
max. Earth dist.	-2337 Aug 23 j 17:35	11°005'36	31.27709 AU	minimum elong	-2329 Sep 11 j 03:16	28°023'34	1°52'40
retrograde	-2337 Dec 04 j 14:48	13°034'17			-2329 Oct 22 j 02:36	0°00'00	
opposition	-2336 Feb 20 j 07:34	12°012'37	1°39'02	retrograde	-2329 Dec 22 j 00:54	0°00'59'59	
min. Earth dist.	-2336 Feb 21 j 06:42	12°011'02	29.28012 AU		-2328 Feb 24 j 15:46	30°00'00	
direct	-2336 May 11 j 14:07	10°047'36		opposition	-2328 Mar 09 j 03:56	29°0238'12	2°01'22
max. Earth dist.	-2336 Aug 25 j 03:14	13°016'35	31.28068 AU	min. Earth dist.	-2328 Mar 10 j 00:43	29°0236'47	29.29922 AU
				direct	-2328 May 29 j 14:10	28°0213'24	
conjunction	-2336 Aug 26 j 04:29	13°018'57	1°34'19		-2328 Aug 23 j 15:29	0°00'00	
minimum elong	-2336 Aug 26 j 04:28	13°018'57	1°34'21				
	-2336 Oct 14 j 16:41	15°00'00		conjunction	-2328 Sep 12 j 13:02	0°00'44'08	1°54'37
retrograde	-2336 Dec 06 j 01:44	15°045'20		minimum elong	-2328 Sep 12 j 13:02	0°00'44'08	1°54'39
	-2335 Jan 29 j 20:43	15°00'00		max. Earth dist.	-2328 Sep 11 j 16:13	0°00'42'11	31.30009 AU
opposition	-2335 Feb 21 j 19:00	14°023'40	1°42'22	retrograde	-2328 Dec 23 j 10:08	3°00'10'36	
min. Earth dist.	-2335 Feb 22 j 18:20	14°022'04	29.28319 AU	opposition	-2327 Mar 11 j 15:42	1°00'48'50	2°03'25
direct	-2335 May 14 j 00:21	12°058'40		min. Earth dist.	-2327 Mar 12 j 11:39	1°00'47'29	29.30368 AU
	-2335 Aug 15 j 04:48	15°00'00		direct	-2327 Jun 01 j 01:56	0°00'24'07	
conjunction	-2335 Aug 28 j 15:04	15°029'56	1°37'23	conjunction	-2327 Sep 14 j 22:46	2°00'54'47	1°56'27
minimum elong	-2335 Aug 28 j 15:04	15°029'56	1°37'25	minimum elong	-2327 Sep 14 j 22:46	2°00'54'47	1°56'29
max. Earth dist.	-2335 Aug 27 j 14:49	15°027'40	31.28306 AU	max. Earth dist.	-2327 Sep 14 j 01:37	2°00'52'48	31.30441 AU
retrograde	-2335 Dec 08 j 11:26	17°056'19		retrograde	-2327 Dec 25 j 21:18	5°00'21'20	
opposition	-2334 Feb 24 j 06:24	16°034'37	1°45'34	opposition	-2326 Mar 14 j 03:32	3°00'59'35	2°05'17
min. Earth dist.	-2334 Feb 25 j 05:58	16°033'00	29.28500 AU	min. Earth dist.	-2326 Mar 14 j 23:15	3°00'58'14	29.30787 AU
direct	-2334 May 16 j 13:45	15°009'38		direct	-2326 Jun 03 j 11:59	2°00'34'56	
max. Earth dist.	-2334 Aug 30 j 00:10	17°038'28	31.28450 AU				
conjunction	-2334 Aug 31 j 01:22	17°040'49	1°40'17	conjunction	-2326 Sep 17 j 08:40	5°00'05'32	1°58'07
minimum elong	-2334 Aug 31 j 01:22	17°040'49	1°40'20	minimum elong	-2326 Sep 17 j 08:39	5°00'05'32	1°58'08
retrograde	-2334 Dec 10 j 23:24	20°007'11		max. Earth dist.	-2326 Sep 16 j 12:56	5°00'03'41	31.30816 AU
opposition	-2333 Feb 26 j 17:53	18°045'27	1°48'36	retrograde	-2326 Dec 28 j 06:52	7°00'32'09	
min. Earth dist.	-2333 Feb 27 j 16:41	18°043'53	29.28625 AU	opposition	-2325 Mar 16 j 15:40	6°00'10'24	2°06'59
direct	-2333 May 19 j 01:32	17°020'28		min. Earth dist.	-2325 Mar 17 j 11:18	6°00'09'04	29.31112 AU
max. Earth dist.	-2333 Sep 01 j 11:45	19°049'20	31.28550 AU	direct	-2325 Jun 06 j 00:13	4°00'45'50	
conjunction	-2333 Sep 02 j 11:32	19°051'34	1°43'04	conjunction	-2325 Sep 19 j 18:16	7°00'16'21	1°59'37
minimum elong	-2333 Sep 02 j 11:32	19°051'34	1°43'06	minimum elong	-2325 Sep 19 j 18:16	7°00'16'21	1°59'38
retrograde	-2333 Dec 13 j 08:28	22°017'54		max. Earth dist.	-2325 Sep 18 j 21:47	7°00'14'26	31.31085 AU
opposition	-2332 Feb 29 j 05:31	20°056'08	1°51'29	retrograde	-2325 Dec 30 j 19:00	9°00'43'02	
min. Earth dist.	-2332 Mar 01 j 04:50	20°054'33	29.28730 AU	opposition	-2324 Mar 18 j 03:44	8°00'21'16	2°08'29
direct	-2332 May 20 j 13:36	19°031'10		min. Earth dist.	-2324 Mar 19 j 22:28	8°00'19'59	29.31323 AU
				direct	-2324 Jun 07 j 10:45	6°00'56'44	
conjunction	-2332 Sep 03 j 21:31	22°002'09	1°45'41	max. Earth dist.	-2324 Sep 20 j 08:52	9°00'25'22	31.31214 AU
minimum elong	-2332 Sep 03 j 21:31	22°002'09	1°45'43				
max. Earth dist.	-2332 Sep 02 j 21:27	21°059'54	31.28675 AU	conjunction	-2324 Sep 21 j 04:08	9°00'27'11	2°00'56
retrograde	-2332 Dec 14 j 19:44	24°028'29		minimum elong	-2324 Sep 21 j 04:08	9°00'27'11	2°00'57
opposition	-2331 Mar 02 j 16:51	23°006'42	1°54'12	retrograde	-2323 Jan 01 j 04:46	11°00'53'55	
min. Earth dist.	-2331 Mar 03 j 14:43	23°005'12	29.28891 AU	opposition	-2323 Mar 20 j 15:51	10°00'32'07	2°09'48
direct	-2331 May 23 j 02:57	21°041'43		min. Earth dist.	-2323 Mar 21 j 11:15	10°00'30'48	29.31380 AU
max. Earth dist.	-2331 Sep 05 j 08:42	24°010'31	31.28865 AU	direct	-2323 Jun 09 j 22:31	9°00'07'38	
conjunction	-2331 Sep 06 j 07:36	24°012'39	1°48'09	conjunction	-2323 Sep 23 j 13:51	11°00'37'59	2°02'05
minimum elong	-2331 Sep 06 j 07:35	24°012'39	1°48'11	minimum elong	-2323 Sep 23 j 13:51	11°00'37'59	2°02'06
retrograde	-2331 Dec 17 j 06:08	26°038'59		max. Earth dist.	-2323 Sep 22 j 18:07	11°00'36'08	31.31203 AU
opposition	-2330 Mar 05 j 04:33	25°017'11	1°56'46	retrograde	-2322 Jan 03 j 16:50	14°00'04'45	
min. Earth dist.	-2330 Mar 06 j 02:48	25°015'39	29.29139 AU	opposition	-2322 Mar 23 j 04:00	12°00'42'55	2°10'57
direct	-2330 May 25 j 15:08	23°052'15		min. Earth dist.	-2322 Mar 23 j 22:07	12°00'41'42	29.31295 AU
				direct	-2322 Jun 12 j 11:48	11°00'18'28	
conjunction	-2330 Sep 08 j 17:25	26°023'06	1°50'28	conjunction	-2322 Sep 25 j 23:27	13°00'48'42	2°03'04
minimum elong	-2330 Sep 08 j 17:24	26°023'06	1°50'30	minimum elong	-2322 Sep 25 j 23:27	13°00'48'42	2°03'05

Planetary Phenomena of Neptune from -2400 through -1900 (UT), Astrodienst AG 7-Dez-2017 14:42, page 6

Attention, astronomical year style is used: The year -2322 in astronomical counting style is the year 2323 BCE in historical counting style.

max. Earth dist.	-2322 Sep 25 j 04:37	13° \mathring{M} 46'56	31.31046 AU	max. Earth dist.	-2314 Oct 12 j 12:58	1° \mathring{A} 11'44	31.29820 AU
retrograde	-2321 Jan 06 j 03:38	16° \mathring{M} 15'32		retrograde	-2313 Jan 23 j 16:28	3° \mathring{A} 40'33	
opposition	-2321 Mar 25 j 16:22	14° \mathring{M} 53'38	2°11'54	opposition	-2313 Apr 12 j 19:33	2° \mathring{A} 18'23	2°12'41
min. Earth dist.	-2321 Mar 26 j 11:04	14° \mathring{M} 52'22	29.31089 AU	min. Earth dist.	-2313 Apr 13 j 06:49	2° \mathring{A} 17'38	29.29906 AU
direct	-2321 Jun 15 j 00:06	13° \mathring{M} 29'12		direct	-2313 Jul 02 j 19:51	0° \mathring{A} 54'26	
conjunction	-2321 Sep 28 j 08:57	15° \mathring{M} 59'19	2°03'52	conjunction	-2313 Oct 15 j 10:52	3° \mathring{A} 23'55	2°03'52
minimum elong	-2321 Sep 28 j 08:57	15° \mathring{M} 59'19	2°03'53	minimum elong	-2313 Oct 15 j 10:53	3° \mathring{A} 23'55	2°03'52
max. Earth dist.	-2321 Sep 27 j 14:37	15° \mathring{M} 57'36	31.30805 AU	max. Earth dist.	-2313 Oct 14 j 23:15	3° \mathring{A} 22'49	31.29672 AU
retrograde	-2320 Jan 08 j 13:25	18° \mathring{M} 26'11		retrograde	-2312 Jan 26 j 04:33	5° \mathring{A} 51'41	
opposition	-2320 Mar 27 j 04:31	17° \mathring{M} 04'13	2°12'40	opposition	-2312 Apr 14 j 08:17	4° \mathring{A} 29'29	2°11'55
min. Earth dist.	-2320 Mar 27 j 21:39	17° \mathring{M} 03'03	29.30814 AU	min. Earth dist.	-2312 Apr 14 j 20:02	4° \mathring{A} 28'41	29.29709 AU
direct	-2320 Jun 16 j 13:15	15° \mathring{M} 39'47		direct	-2312 Jul 04 j 07:09	3° \mathring{A} 05'36	
conjunction	-2320 Sep 29 j 18:16	18° \mathring{M} 09'48	2°04'30	conjunction	-2312 Oct 16 j 20:10	5° \mathring{A} 35'01	2°03'03
minimum elong	-2320 Sep 29 j 18:16	18° \mathring{M} 09'48	2°04'31	minimum elong	-2312 Oct 16 j 20:10	5° \mathring{A} 35'01	2°03'03
max. Earth dist.	-2320 Sep 29 j 00:18	18° \mathring{M} 08'06	31.30513 AU	max. Earth dist.	-2312 Oct 16 j 09:08	5° \mathring{A} 33'59	31.29416 AU
retrograde	-2319 Jan 09 j 23:12	20° \mathring{M} 36'43		retrograde	-2311 Jan 27 j 15:05	8° \mathring{A} 02'54	
opposition	-2319 Mar 29 j 16:50	19° \mathring{M} 14'41	2°13'15	opposition	-2311 Apr 16 j 20:59	6° \mathring{A} 40'40	2°10'57
min. Earth dist.	-2319 Mar 30 j 09:58	19° \mathring{M} 13'31	29.30535 AU	min. Earth dist.	-2311 Apr 17 j 07:12	6° \mathring{A} 39'59	29.29369 AU
direct	-2319 Jun 19 j 00:29	17° \mathring{M} 50'17		direct	-2311 Jul 06 j 20:08	5° \mathring{A} 16'50	
max. Earth dist.	-2319 Oct 01 j 11:11	20° \mathring{M} 18'38	31.30250 AU	conjunction	-2311 Oct 19 j 05:24	7° \mathring{A} 46'10	2°02'04
conjunction	-2319 Oct 02 j 03:35	20° \mathring{M} 20'10	2°04'57	minimum elong	-2311 Oct 19 j 05:25	7° \mathring{A} 46'10	2°02'04
minimum elong	-2319 Oct 02 j 03:35	20° \mathring{M} 20'10	2°04'57	max. Earth dist.	-2311 Oct 18 j 18:23	7° \mathring{A} 45'08	31.28997 AU
retrograde	-2318 Jan 12 j 08:13	22° \mathring{M} 47'10		retrograde	-2310 Jan 30 j 02:09	10° \mathring{A} 14'10	
opposition	-2318 Apr 01 j 05:07	21° \mathring{M} 25'05	2°13'38	opposition	-2310 Apr 19 j 09:53	8° \mathring{A} 51'52	2°09'49
min. Earth dist.	-2318 Apr 01 j 20:56	21° \mathring{M} 24'00	29.30293 AU	min. Earth dist.	-2310 Apr 19 j 20:16	8° \mathring{A} 51'10	29.28880 AU
direct	-2318 Jun 21 j 13:01	20° \mathring{M} 00'43		direct	-2310 Jul 09 j 08:05	7° \mathring{A} 28'05	
conjunction	-2318 Oct 04 j 12:48	22° \mathring{M} 30'31	2°05'13	conjunction	-2310 Oct 21 j 14:46	9° \mathring{A} 57'18	2°00'55
minimum elong	-2318 Oct 04 j 12:47	22° \mathring{M} 30'31	2°05'13	minimum elong	-2310 Oct 21 j 14:46	9° \mathring{A} 57'18	2°00'55
max. Earth dist.	-2318 Oct 03 j 20:29	22° \mathring{M} 28'59	31.30053 AU	max. Earth dist.	-2310 Oct 21 j 05:07	9° \mathring{A} 56'24	31.28441 AU
retrograde	-2317 Jan 14 j 19:27	24° \mathring{M} 57'37		retrograde	-2309 Feb 01 j 12:08	12° \mathring{A} 25'23	
opposition	-2317 Apr 03 j 17:32	23° \mathring{M} 35'29	2°13'50	opposition	-2309 Apr 21 j 22:45	11° \mathring{A} 03'01	2°08'29
min. Earth dist.	-2317 Apr 04 j 08:24	23° \mathring{M} 34'29	29.30151 AU	min. Earth dist.	-2309 Apr 22 j 08:04	11° \mathring{A} 02'23	29.28243 AU
direct	-2317 Jun 23 j 23:09	22° \mathring{M} 11'11		direct	-2309 Jul 11 j 21:40	9° \mathring{A} 39'15	
conjunction	-2317 Oct 06 j 22:00	24° \mathring{M} 40'55	2°05'19	conjunction	-2309 Oct 23 j 23:49	12° \mathring{A} 08'21	1°59'35
minimum elong	-2317 Oct 06 j 22:00	24° \mathring{M} 40'55	2°05'19	minimum elong	-2309 Oct 23 j 23:50	12° \mathring{A} 08'21	1°59'34
max. Earth dist.	-2317 Oct 06 j 07:44	24° \mathring{M} 39'34	31.29949 AU	max. Earth dist.	-2309 Oct 23 j 13:57	12° \mathring{A} 07'25	31.27755 AU
retrograde	-2316 Jan 17 j 04:52	27° \mathring{M} 08'07		retrograde	-2308 Feb 03 j 23:09	14° \mathring{A} 36'32	
opposition	-2316 Apr 05 j 05:58	25° \mathring{M} 45'59	2°13'50	opposition	-2308 Apr 23 j 11:35	13° \mathring{A} 14'03	2°06'59
min. Earth dist.	-2316 Apr 05 j 20:10	25° \mathring{M} 45'01	29.30073 AU	min. Earth dist.	-2308 Apr 23 j 20:18	13° \mathring{A} 13'28	29.27513 AU
direct	-2316 Jun 25 j 10:46	24° \mathring{M} 21'46		direct	-2308 Jul 13 j 08:26	11° \mathring{A} 50'17	
conjunction	-2316 Oct 08 j 07:09	26° \mathring{M} 51'25	2°05'13	conjunction	-2308 Oct 25 j 09:03	14° \mathring{A} 19'15	1°58'05
minimum elong	-2316 Oct 08 j 07:09	26° \mathring{M} 51'25	2°05'13	minimum elong	-2308 Oct 25 j 09:03	14° \mathring{A} 19'15	1°58'04
max. Earth dist.	-2316 Oct 07 j 16:41	26° \mathring{M} 50'03	31.29907 AU	max. Earth dist.	-2308 Oct 25 j 01:02	14° \mathring{A} 18'29	31.26992 AU
retrograde	-2315 Jan 18 j 17:06	29° \mathring{M} 18'46		retrograde	-2307 Feb 05 j 07:39	16° \mathring{A} 47'31	
opposition	-2315 Apr 07 j 18:13	27° \mathring{M} 56'37	2°13'39	opposition	-2307 Apr 26 j 00:18	15° \mathring{A} 24'56	2°05'17
min. Earth dist.	-2315 Apr 08 j 07:00	27° \mathring{M} 55'45	29.30045 AU	min. Earth dist.	-2307 Apr 26 j 08:24	15° \mathring{A} 24'23	29.26727 AU
direct	-2315 Jun 27 j 20:12	26° \mathring{M} 32'29		direct	-2307 Jul 15 j 20:48	14° \mathring{A} 01'10	
conjunction	-2315 Oct 10 j 16:28	29° \mathring{M} 02'05	2°04'57	conjunction	-2307 Oct 27 j 18:01	16° \mathring{A} 30'00	1°56'26
minimum elong	-2315 Oct 10 j 16:28	29° \mathring{M} 02'05	2°04'57	minimum elong	-2307 Oct 27 j 18:02	16° \mathring{A} 30'00	1°56'24
max. Earth dist.	-2315 Oct 10 j 03:42	29° \mathring{M} 00'53	31.29877 AU	max. Earth dist.	-2307 Oct 27 j 10:01	16° \mathring{A} 29'15	31.26223 AU
retrograde	-2315 Nov 05 j 22:38	0° \mathring{A}		retrograde	-2306 Feb 07 j 19:29	18° \mathring{A} 58'22	
opposition	-2314 Jan 21 j 03:32	1° \mathring{A} 29'34		opposition	-2306 Apr 28 j 13:07	17° \mathring{A} 35'41	2°03'25
min. Earth dist.	-2314 Apr 10 j 06:54	0° \mathring{A} 07'25	2°13'16	min. Earth dist.	-2306 Apr 28 j 19:28	17° \mathring{A} 35'15	29.25981 AU
direct	-2314 Apr 10 j 19:51	0° \mathring{A} 06'33	29.30002 AU	direct	-2306 Jul 18 j 06:52	16° \mathring{A} 11'55	
conjunction	-2314 Apr 14 j 20:54	30° \mathring{R} \mathring{M}		conjunction	-2306 Oct 30 j 03:02	18° \mathring{A} 40'38	1°54'36
minimum elong	-2314 Jun 30 j 07:14	28° \mathring{M} 43'23		minimum elong	-2306 Oct 30 j 03:02	18° \mathring{A} 40'38	1°54'34
direct	-2314 Sep 09 j 09:17	0° \mathring{A}		max. Earth dist.	-2306 Oct 29 j 20:58	18° \mathring{A} 40'04	31.25507 AU
conjunction	-2314 Oct 13 j 01:33	1° \mathring{A} 12'56	2°04'30	retrograde	-2305 Feb 10 j 05:36	21° \mathring{A} 09'08	
minimum elong	-2314 Oct 13 j 01:33	1° \mathring{A} 12'56	2°04'30	opposition	-2305 May 01 j 02:06	19° \mathring{A} 46'21	2°01'23

Planetary Phenomena of Neptune from -2400 through -1900 (UT), Astrodienst AG 7-Dez-2017 14:42, page 7

Attention, astronomical year style is used: The year -2305 in astronomical counting style is the year 2306 BCE in historical counting style.

min. Earth dist.	-2305 May 01 j 08:08	19° 4 45'57	29.25306 AU	min. Earth dist.	-2297 May 19 j 08:09	7° 7 15'36	29.20716 AU
direct	-2305 Jul 20 j 18:16	18° 4 22'37		direct	-2297 Aug 07 j 13:34	5° 5 52'14	
conjunction	-2305 Nov 01 j 12:01	20° 4 51'14	1°52'36	conjunction	-2297 Nov 18 j 13:28	8° 8 20'22	1°31'00
minimum elong	-2305 Nov 01 j 12:02	20° 4 51'14	1°52'35	minimum elong	-2297 Nov 18 j 13:28	8° 8 20'23	1°30'58
max. Earth dist.	-2305 Nov 01 j 06:38	20° 4 50'44	31.24893 AU	max. Earth dist.	-2297 Nov 18 j 15:20	8° 8 20'33	31.20175 AU
retrograde	-2304 Feb 12 j 18:08	23° 4 19'51		retrograde	-2296 Mar 01 j 13:41	10° 10 50'18	
opposition	-2304 May 02 j 14:43	21° 4 57'01	1°59'10	opposition	-2296 May 20 j 23:15	9° 9 27'04	1°35'27
min. Earth dist.	-2304 May 02 j 18:38	21° 4 56'45	29.24733 AU	min. Earth dist.	-2296 May 20 j 21:26	9° 9 27'12	29.19764 AU
direct	-2304 Jul 22 j 05:33	20° 4 33'20		direct	-2296 Aug 09 j 00:59	8° 8 03'52	
conjunction	-2304 Nov 02 j 21:03	23° 4 01'53	1°50'26	conjunction	-2296 Nov 19 j 22:46	10° 10 31'54	1°27'39
minimum elong	-2304 Nov 02 j 21:03	23° 4 01'53	1°50'25	minimum elong	-2296 Nov 19 j 22:47	10° 10 31'54	1°27'37
max. Earth dist.	-2304 Nov 02 j 16:54	23° 4 01'29	31.24362 AU	max. Earth dist.	-2296 Nov 20 j 01:06	10° 10 32'07	31.19199 AU
retrograde	-2303 Feb 14 j 06:08	25° 4 30'39		retrograde	-2295 Mar 04 j 02:24	13° 13 01'58	
opposition	-2303 May 05 j 03:42	24° 4 07'46	1°56'46	opposition	-2295 May 23 j 12:18	11° 11 38'38	1°31'49
min. Earth dist.	-2303 May 05 j 07:33	24° 4 07'30	29.24237 AU	min. Earth dist.	-2295 May 23 j 08:38	11° 11 38'53	29.18755 AU
direct	-2303 Jul 24 j 15:50	22° 4 44'09		direct	-2295 Aug 11 j 12:11	10° 10 15'25	
conjunction	-2303 Nov 05 j 06:01	25° 4 12'38	1°48'07	conjunction	-2295 Nov 22 j 07:56	12° 12 43'22	1°24'12
minimum elong	-2303 Nov 05 j 06:01	25° 4 12'38	1°48'05	minimum elong	-2295 Nov 22 j 07:56	12° 12 43'22	1°24'09
max. Earth dist.	-2303 Nov 05 j 03:12	25° 4 12'22	31.23904 AU	max. Earth dist.	-2295 Nov 22 j 11:17	12° 12 43'41	31.18180 AU
retrograde	-2302 Feb 16 j 17:30	27° 4 41'34			-2294 Feb 05 j 20:44	15° 15	
opposition	-2302 May 07 j 16:36	26° 4 18'39	1°54'12	retrograde	-2294 Mar 06 j 14:22	15° 15 13'34	
min. Earth dist.	-2302 May 07 j 18:23	26° 4 18'31	29.23782 AU		-2294 Apr 05 j 01:07	15° 15 11	
direct	-2302 Jul 27 j 04:20	24° 4 55'06		opposition	-2294 May 26 j 01:32	13° 13 50'08	1°28'03
conjunction	-2302 Nov 07 j 15:03	27° 4 23'32	1°45'38	min. Earth dist.	-2294 May 25 j 21:51	13° 13 50'23	29.17750 AU
minimum elong	-2302 Nov 07 j 15:03	27° 4 23'33	1°45'37	direct	-2294 Aug 13 j 21:57	12° 12 26'55	
max. Earth dist.	-2302 Nov 07 j 12:36	27° 4 23'19	31.23461 AU	conjunction	-2294 Nov 24 j 17:15	14° 14 54'47	1°20'37
retrograde	-2301 Feb 19 j 05:57	29° 4 52'39		minimum elong	-2294 Nov 24 j 17:15	14° 14 54'47	1°20'34
opposition	-2301 May 10 j 05:41	28° 4 29'42	1°51'28	max. Earth dist.	-2294 Nov 24 j 22:06	14° 14 55'15	31.17213 AU
min. Earth dist.	-2301 May 10 j 07:17	28° 4 29'35	29.23340 AU		-2294 Nov 27 j 00:11	15° 15	
direct	-2301 Jul 29 j 15:32	27° 4 06'14		retrograde	-2293 Mar 09 j 02:13	17° 17 25'07	
conjunction	-2301 Nov 10 j 00:13	29° 4 34'38	1°43'00	opposition	-2293 May 28 j 14:30	16° 16 01'35	1°24'09
minimum elong	-2301 Nov 10 j 00:13	29° 4 34'38	1°42'58	min. Earth dist.	-2293 May 28 j 08:39	16° 16 01'59	29.16814 AU
max. Earth dist.	-2301 Nov 09 j 23:33	29° 4 34'34	31.23006 AU		-2293 Jul 10 j 05:36	15° 15 11	
	-2301 Nov 21 j 05:06	0° 0		direct	-2293 Aug 16 j 10:36	14° 14 38'23	
retrograde	-2300 Feb 21 j 16:58	2° 2 03'54			-2293 Sep 21 j 13:24	15° 15	
opposition	-2300 May 11 j 18:42	0° 0 40'56	1°48'34	conjunction	-2293 Nov 27 j 02:28	17° 17 06'12	1°16'55
min. Earth dist.	-2300 May 11 j 19:06	0° 0 40'54	29.22840 AU	minimum elong	-2293 Nov 27 j 02:29	17° 17 06'12	1°16'52
	-2300 Jun 07 j 04:31	30° 30 11		max. Earth dist.	-2293 Nov 27 j 07:42	17° 17 06'42	31.16326 AU
direct	-2300 Jul 31 j 04:39	29° 2 17'33		retrograde	-2292 Mar 10 j 15:40	19° 19 36'40	
	-2300 Sep 20 j 10:49	0° 0		opposition	-2292 May 30 j 03:36	18° 18 13'04	1°20'08
conjunction	-2300 Nov 11 j 09:22	1° 1 45'53	1°40'12	min. Earth dist.	-2292 May 29 j 21:20	18° 18 13'29	29.15982 AU
minimum elong	-2300 Nov 11 j 09:23	1° 1 45'53	1°40'10	direct	-2292 Aug 17 j 21:48	16° 16 49'54	
max. Earth dist.	-2300 Nov 11 j 08:27	1° 1 45'48	31.22471 AU	conjunction	-2292 Nov 28 j 11:52	19° 19 17'39	1°13'06
retrograde	-2299 Feb 23 j 04:58	4° 4 15'21		minimum elong	-2292 Nov 28 j 11:52	19° 19 17'39	1°13'03
opposition	-2299 May 14 j 07:44	2° 2 52'20	1°45'30	max. Earth dist.	-2292 Nov 28 j 19:10	19° 19 18'21	31.15547 AU
min. Earth dist.	-2299 May 14 j 07:33	2° 2 52'20	29.22259 AU	retrograde	-2291 Mar 13 j 03:14	21° 21 48'17	
direct	-2299 Aug 02 j 14:59	1° 1 29'01		opposition	-2291 Jun 01 j 16:32	20° 20 24'37	1°16'00
conjunction	-2299 Nov 13 j 18:47	3° 3 57'18	1°37'16	min. Earth dist.	-2291 Jun 01 j 08:40	20° 20 25'09	29.15239 AU
minimum elong	-2299 Nov 13 j 18:48	3° 3 57'18	1°37'14	direct	-2291 Aug 20 j 10:44	19° 19 01'30	
max. Earth dist.	-2299 Nov 13 j 19:35	3° 3 57'23	31.21831 AU	conjunction	-2291 Nov 30 j 21:12	21° 21 29'13	1°09'10
retrograde	-2298 Feb 25 j 14:35	6° 6 26'56		minimum elong	-2291 Nov 30 j 21:12	21° 21 29'13	1°09'07
opposition	-2298 May 16 j 20:59	5° 5 03'52	1°42'18	max. Earth dist.	-2291 Dec 01 j 04:36	21° 21 29'55	31.14862 AU
min. Earth dist.	-2298 May 16 j 20:19	5° 5 03'54	29.21547 AU	retrograde	-2290 Mar 15 j 15:41	24° 24 00'01	
direct	-2298 Aug 05 j 03:20	3° 3 40'36		opposition	-2290 Jun 04 j 05:42	22° 22 36'18	1°11'45
conjunction	-2298 Nov 16 j 04:00	6° 6 08'49	1°34'12	min. Earth dist.	-2290 Jun 03 j 20:53	22° 22 36'54	29.14595 AU
minimum elong	-2298 Nov 16 j 04:00	6° 6 08'49	1°34'10	direct	-2290 Aug 22 j 20:52	21° 21 13'14	
max. Earth dist.	-2298 Nov 16 j 04:30	6° 6 08'52	31.21069 AU	conjunction	-2290 Dec 03 j 06:39	23° 23 40'55	1°05'08
retrograde	-2297 Feb 28 j 03:18	8° 8 38'36		minimum elong	-2290 Dec 03 j 06:40	23° 23 40'55	1°05'05
opposition	-2297 May 19 j 10:11	7° 7 15'28	1°38'56	max. Earth dist.	-2290 Dec 03 j 16:09	23° 23 41'49	31.14243 AU

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Attention, astronomical year style is used: The year -2289 in astronomical counting style is the year 2290 BCE in historical counting style.

retrograde	-2289 Mar 18 j 02:03	26° ℳ 11'53		retrograde	-2281 Apr 05 j 07:20	13° ♊ 51'08	
opposition	-2289 Jun 06 j 18:51	24° ℳ 48'09	1°07'23	opposition	-2281 Jun 25 j 04:15	12° ♊ 26'49	0°29'21
min. Earth dist.	-2289 Jun 06 j 09:21	24° ℳ 48'47	29.13983 AU	min. Earth dist.	-2281 Jun 24 j 13:17	12° ♊ 27'50	29.06665 AU
direct	-2289 Aug 25 j 09:42	23° ℳ 25'09		direct	-2281 Sep 12 j 02:48	11° ♊ 03'55	
conjunction	-2289 Dec 05 j 16:14	25° ℳ 52'48	1°01'00	conjunction	-2281 Dec 23 j 00:04	13° ♊ 31'17	0°25'11
minimum elong	-2289 Dec 05 j 16:14	25° ℳ 52'48	1°00'57	minimum elong	-2281 Dec 23 j 00:04	13° ♊ 31'17	0°25'07
max. Earth dist.	-2289 Dec 06 j 01:41	25° ℳ 53'42	31.13649 AU	max. Earth dist.	-2281 Dec 23 j 15:56	13° ♊ 32'47	31.06112 AU
retrograde	-2288 Mar 19 j 15:40	28° ℳ 23'57		retrograde	-2280 Apr 06 j 18:32	16° ♊ 03'35	
opposition	-2288 Jun 08 j 07:49	27° ℳ 00'10	1°02'54	opposition	-2280 Jun 26 j 17:07	14° ♊ 39'12	0°24'20
min. Earth dist.	-2288 Jun 07 j 20:58	27° ℳ 00'54	29.13378 AU	min. Earth dist.	-2280 Jun 26 j 01:27	14° ♊ 40'16	29.05623 AU
direct	-2288 Aug 26 j 20:10	25° ♊ 37'13		direct	-2280 Sep 13 j 15:50	13° ♊ 16'18	
conjunction	-2288 Dec 07 j 02:00	28° ℳ 04'51	0°56'46	conjunction	-2280 Dec 24 j 10:12	15° ♊ 43'40	0°20'28
minimum elong	-2288 Dec 07 j 02:01	28° ℳ 04'51	0°56'43	minimum elong	-2280 Dec 24 j 10:12	15° ♊ 43'40	0°20'25
max. Earth dist.	-2288 Dec 07 j 12:47	28° ℳ 05'53	31.13016 AU	max. Earth dist.	-2280 Dec 25 j 02:09	15° ♊ 45'10	31.05131 AU
retrograde	-2287 Feb 02 j 14:03	0° ♊		retrograde	-2279 Apr 09 j 08:40	18° ♊ 16'07	
opposition	-2287 Mar 22 j 02:08	0° ♊ 36'11		opposition	-2279 Jun 29 j 06:06	16° ♊ 51'40	0°19'16
min. Earth dist.	-2287 May 10 j 17:03	30° ♋		min. Earth dist.	-2279 Jun 28 j 12:55	16° ♊ 52'50	29.04698 AU
opposition	-2287 Jun 10 j 21:06	29° ℳ 12'22	0°58'20	direct	-2279 Sep 16 j 02:40	15° ♊ 28'47	
min. Earth dist.	-2287 Jun 10 j 10:25	29° ℳ 13'05	29.12710 AU	conjunction	-2279 Dec 26 j 20:22	17° ♊ 56'09	0°15'43
direct	-2287 Aug 29 j 07:20	27° ℳ 49'29		minimum elong	-2279 Dec 26 j 20:22	17° ♊ 56'09	0°15'40
conjunction	-2287 Dec 01 j 23:33	0° ♊		behind sun begin	-2279 Dec 26 j 18:40	17° ♊ 56'00	
minimum elong	-2287 Dec 09 j 11:44	0° ♊ 17'04	0°52'27	behind sun end	-2279 Dec 26 j 22:04	17° ♊ 56'18	
max. Earth dist.	-2287 Dec 09 j 11:45	0° ♊ 17'04	0°52'24	max. Earth dist.	-2279 Dec 27 j 13:48	17° ♊ 57'48	31.04250 AU
retrograde	-2286 Mar 24 j 14:59	2° ♊ 48'34		retrograde	-2278 Apr 11 j 19:05	20° ♊ 28'46	
opposition	-2286 Jun 13 j 10:21	1° ♊ 24'42	0°53'41	opposition	-2278 Jul 01 j 19:12	19° ♊ 04'17	0°14'10
min. Earth dist.	-2286 Jun 12 j 22:05	1° ♊ 25'32	29.11951 AU	min. Earth dist.	-2278 Jul 01 j 01:54	19° ♊ 05'28	29.03868 AU
direct	-2286 Aug 31 j 18:09	0° ♊ 01'51		direct	-2278 Sep 18 j 13:51	17° ♊ 41'27	
conjunction	-2286 Dec 11 j 21:43	2° ♊ 29'25	0°48'04	conjunction	-2278 Dec 29 j 06:45	20° ♊ 08'49	0°10'57
minimum elong	-2286 Dec 11 j 21:44	2° ♊ 29'25	0°48'01	minimum elong	-2278 Dec 29 j 06:45	20° ♊ 08'49	0°10'54
max. Earth dist.	-2286 Dec 12 j 09:23	2° ♊ 30'31	31.11492 AU	behind sun begin	-2278 Dec 29 j 01:50	20° ♊ 08'22	
retrograde	-2285 Mar 27 j 03:20	5° ♊ 01'05		behind sun end	-2278 Dec 29 j 11:39	20° ♊ 09'16	
opposition	-2285 Jun 15 j 23:38	3° ♊ 37'08	0°48'56	max. Earth dist.	-2278 Dec 30 j 00:55	20° ♊ 10'32	31.03475 AU
min. Earth dist.	-2285 Jun 15 j 11:57	3° ♊ 37'56	29.11066 AU	retrograde	-2277 Apr 14 j 07:57	22° ♊ 41'36	
direct	-2285 Sep 03 j 03:42	2° ♊ 14'18		opposition	-2277 Jul 04 j 08:00	21° ♊ 17'06	0°09'02
conjunction	-2285 Dec 14 j 07:49	4° ♊ 41'50	0°43'36	min. Earth dist.	-2277 Jul 03 j 13:03	21° ♊ 18'23	29.03126 AU
minimum elong	-2285 Dec 14 j 07:50	4° ♊ 41'50	0°43'33	direct	-2277 Sep 21 j 00:16	19° ♊ 54'17	
max. Earth dist.	-2285 Dec 14 j 20:25	4° ♊ 43'01	31.10547 AU	conjunction	-2277 Dec 31 j 17:12	22° ♊ 21'41	0°06'10
retrograde	-2284 Mar 28 j 16:10	7° ♊ 13'37		minimum elong	-2277 Dec 31 j 17:12	22° ♊ 21'41	0°06'06
opposition	-2284 Jun 17 j 12:47	5° ♊ 49'36	0°44'08	behind sun begin	-2277 Dec 31 j 11:05	22° ♊ 21'08	
min. Earth dist.	-2284 Jun 16 j 23:33	5° ♊ 50'30	29.10043 AU	behind sun end	-2277 Dec 31 j 23:19	22° ♊ 22'14	
direct	-2284 Sep 04 j 16:23	4° ♊ 26'45		max. Earth dist.	-2276 Jan 01 j 11:53	22° ♊ 23'27	31.02751 AU
conjunction	-2284 Dec 15 j 17:45	6° ♊ 54'14	0°39'04	retrograde	-2276 Apr 15 j 20:25	24° ♊ 54'39	
minimum elong	-2284 Dec 15 j 17:46	6° ♊ 54'14	0°39'01	opposition	-2276 Jul 05 j 21:03	23° ♊ 30'07	0°03'54
max. Earth dist.	-2284 Dec 16 j 06:06	6° ♊ 55'24	31.09470 AU	min. Earth dist.	-2276 Jul 05 j 02:34	23° ♊ 31'23	29.02422 AU
retrograde	-2283 Mar 31 j 06:01	9° ♊ 26'10		direct	-2276 Sep 22 j 09:05	22° ♊ 07'21	
opposition	-2283 Jun 20 j 02:01	8° ♊ 02'03	0°39'16	conjunction	-2275 Jan 02 j 03:48	24° ♊ 34'47	0°01'19
min. Earth dist.	-2283 Jun 19 j 12:57	8° ♊ 02'56	29.08927 AU	minimum elong	-2275 Jan 02 j 03:47	24° ♊ 34'47	0°01'16
direct	-2283 Sep 07 j 03:15	6° ♊ 39'11		behind sun begin	-2275 Jan 01 j 21:22	24° ♊ 34'12	
conjunction	-2283 Dec 18 j 03:53	9° ♊ 06'37	0°34'29	behind sun end	-2275 Jan 02 j 10:13	24° ♊ 35'22	
minimum elong	-2283 Dec 18 j 03:54	9° ♊ 06'37	0°34'25	max. Earth dist.	-2275 Jan 02 j 23:39	24° ♊ 36'39	31.02054 AU
max. Earth dist.	-2283 Dec 18 j 18:00	9° ♊ 07'57	31.08333 AU	desc. node	-2275 Apr 09 j 13:22	27° ♊ 06'37	
retrograde	-2282 Apr 02 j 18:05	11° ♊ 38'40		retrograde	-2275 Apr 18 j 09:34	27° ♊ 07'54	
opposition	-2282 Jun 22 j 15:08	10° ♊ 14'27	0°34'20	opposition	-2275 Jul 08 j 09:56	25° ♊ 43'22	0°-1'-15
min. Earth dist.	-2282 Jun 22 j 00:47	10° ♊ 15'25	29.07774 AU	min. Earth dist.	-2275 Jul 07 j 13:57	25° ♊ 44'44	29.01711 AU
direct	-2282 Sep 09 j 16:10	8° ♊ 51'33		direct	-2275 Sep 24 j 21:18	24° ♊ 20'38	
conjunction	-2282 Dec 20 j 13:49	11° ♊ 18'57	0°29'51	conjunction	-2274 Jan 04 j 14:29	26° ♊ 48'05	0°-3'-36
minimum elong	-2282 Dec 20 j 13:49	11° ♊ 18'57	0°29'48	minimum elong	-2274 Jan 04 j 14:29	26° ♊ 48'05	0°03'41
max. Earth dist.	-2282 Dec 21 j 03:49	11° ♊ 20'16	31.07196 AU	behind sun begin	-2274 Jan 04 j 08:07	26° ♊ 47'31	
				behind sun end	-2274 Jan 04 j 20:52	26° ♊ 48'40	
				max. Earth dist.	-2274 Jan 05 j 09:57	26° ♊ 49'56	31.01321 AU

Attention, astronomical year style is used: The year -2274 in astronomical counting style is the year 2275 BCE in historical counting style.

retrograde	-2274 Apr 21 j 00:00	29° 2 21'23		conjunction	-2266 Jan 22 j 07:54	14° 3 35'48	0°-41'-22
opposition	-2274 Jul 10 j 23:01	27° 2 56'48	0°-6'-24	minimum elong	-2266 Jan 22 j 07:54	14° 3 35'48	0°41'26
min. Earth dist.	-2274 Jul 10 j 03:29	27° 2 58'08	29.00957 AU	max. Earth dist.	-2266 Jan 23 j 07:43	14° 3 38'03	30.93365 AU
direct	-2274 Sep 27 j 07:02	26° 2 34'05		retrograde	-2266 May 09 j 06:54	17° 3 09'50	
				min. Earth dist.	-2266 Jul 28 j 05:39	15° 3 46'16	28.93031 AU
conjunction	-2273 Jan 07 j 01:32	29° 2 01'35	0°-8'-24	opposition	-2266 Jul 29 j 05:02	15° 3 44'39	0°-46'-42
minimum elong	-2273 Jan 07 j 01:32	29° 2 01'35	0°08'28	direct	-2266 Oct 15 j 04:32	14° 3 21'38	
behind sun begin	-2273 Jan 06 j 19:53	29° 2 01'04					
behind sun end	-2273 Jan 07 j 07:11	29° 2 02'06		conjunction	-2265 Jan 24 j 19:19	16° 3 49'12	0°-45'-53
max. Earth dist.	-2273 Jan 07 j 22:21	29° 2 03'33	31.00518 AU	minimum elong	-2265 Jan 24 j 19:18	16° 3 49'12	0°45'57
	-2273 Feb 02 j 09:05	0° 3		max. Earth dist.	-2265 Jan 25 j 18:48	16° 3 51'25	30.92640 AU
retrograde	-2273 Apr 23 j 12:48	1° 3 35'00		retrograde	-2265 May 11 j 20:16	19° 3 23'20	
opposition	-2273 Jul 13 j 11:59	0° 3 10'23	0°-11'-33	opposition	-2265 Jul 31 j 17:38	17° 3 58'08	0°-51'-30
min. Earth dist.	-2273 Jul 12 j 15:40	0° 3 11'46	29.00093 AU	min. Earth dist.	-2265 Jul 30 j 18:35	17° 3 59'43	28.92378 AU
	-2273 Jul 19 j 19:45	30° R		direct	-2265 Oct 17 j 13:43	16° 3 35'07	
direct	-2273 Sep 29 j 19:10	28° 2 47'39					
	-2273 Dec 05 j 22:16	0° 3		conjunction	-2264 Jan 27 j 07:00	19° 3 02'44	0°-50'-21
				minimum elong	-2264 Jan 27 j 07:00	19° 3 02'44	0°50'26
conjunction	-2272 Jan 09 j 12:34	1° 3 15'10	0°-13'-12	max. Earth dist.	-2264 Jan 28 j 08:01	19° 3 05'06	30.92037 AU
minimum elong	-2272 Jan 09 j 12:34	1° 3 15'10	0°13'16	retrograde	-2264 May 13 j 09:02	21° 3 36'59	
behind sun begin	-2272 Jan 09 j 08:46	1° 3 14'50		min. Earth dist.	-2264 Aug 01 j 05:59	20° 3 13'26	28.91821 AU
behind sun end	-2272 Jan 09 j 16:22	1° 3 15'31		opposition	-2264 Aug 02 j 05:57	20° 3 11'46	0°-56'-14
max. Earth dist.	-2272 Jan 10 j 08:32	1° 3 17'04	30.99597 AU	direct	-2264 Oct 19 j 01:07	18° 3 48'46	
retrograde	-2272 Apr 25 j 03:18	3° 3 48'43					
min. Earth dist.	-2272 Jul 14 j 04:39	2° 3 25'24	28.99118 AU	conjunction	-2263 Jan 28 j 18:39	21° 3 16'28	0°-54'-44
opposition	-2272 Jul 15 j 00:52	2° 3 24'01	0°-16'-41	minimum elong	-2263 Jan 28 j 18:39	21° 3 16'28	0°54'48
direct	-2272 Oct 01 j 06:00	1° 3 01'16		max. Earth dist.	-2263 Jan 29 j 19:02	21° 3 18'46	30.91523 AU
				retrograde	-2263 May 16 j 00:03	23° 3 50'50	
conjunction	-2271 Jan 10 j 23:47	3° 3 28'48	0°-17'-59	opposition	-2263 Aug 04 j 18:31	22° 3 25'38	-1°00'-53
minimum elong	-2271 Jan 10 j 23:47	3° 3 28'48	0°18'03	min. Earth dist.	-2263 Aug 03 j 18:36	22° 3 27'17	28.91347 AU
max. Earth dist.	-2271 Jan 11 j 20:59	3° 3 30'48	30.98558 AU	direct	-2263 Oct 21 j 11:17	21° 3 02'39	
retrograde	-2271 Apr 27 j 16:14	6° 3 02'25					
opposition	-2271 Jul 17 j 13:49	4° 3 37'38	0°-21'-48	conjunction	-2262 Jan 31 j 06:32	23° 3 30'26	0°-59'-3
min. Earth dist.	-2271 Jul 16 j 17:29	4° 3 39'02	28.98029 AU	minimum elong	-2262 Jan 31 j 06:31	23° 3 30'26	0°59'07
direct	-2271 Oct 03 j 19:40	3° 3 14'51		max. Earth dist.	-2262 Feb 01 j 08:12	23° 3 32'52	30.91051 AU
				retrograde	-2262 May 18 j 13:47	26° 3 04'55	
conjunction	-2270 Jan 13 j 10:48	5° 3 42'21	0°-22'-44	min. Earth dist.	-2262 Aug 06 j 07:10	24° 3 41'22	28.90875 AU
minimum elong	-2270 Jan 13 j 10:47	5° 3 42'21	0°22'49	opposition	-2262 Aug 07 j 07:00	24° 3 39'43	-1°-5'-27
max. Earth dist.	-2270 Jan 14 j 07:33	5° 3 44'19	30.97446 AU	direct	-2262 Oct 24 j 00:02	23° 3 16'46	
retrograde	-2270 Apr 30 j 06:24	8° 3 16'04					
min. Earth dist.	-2270 Jul 19 j 05:30	6° 3 52'38	28.96901 AU	conjunction	-2261 Feb 02 j 18:39	25° 3 44'38	-1°-3'-17
opposition	-2270 Jul 20 j 02:40	6° 3 51'11	0°-26'-52	minimum elong	-2261 Feb 02 j 18:39	25° 3 44'38	1°03'20
direct	-2270 Oct 06 j 07:14	5° 3 28'19		max. Earth dist.	-2261 Feb 03 j 19:29	25° 3 46'59	30.90569 AU
				retrograde	-2261 May 21 j 04:43	28° 3 19'13	
conjunction	-2269 Jan 15 j 22:02	7° 3 55'49	0°-27'-27	opposition	-2261 Aug 09 j 19:20	26° 3 54'02	-1°-9'-56
minimum elong	-2269 Jan 15 j 22:02	7° 3 55'49	0°27'31	min. Earth dist.	-2261 Aug 08 j 19:11	26° 3 55'42	28.90374 AU
max. Earth dist.	-2269 Jan 16 j 19:46	7° 3 57'52	30.96304 AU	direct	-2261 Oct 26 j 11:02	25° 3 31'04	
retrograde	-2269 May 02 j 17:19	10° 3 29'35					
opposition	-2269 Jul 22 j 15:19	9° 3 04'37	0°-31'-54	conjunction	-2260 Feb 05 j 06:58	27° 3 59'02	-1°-7'-25
min. Earth dist.	-2269 Jul 21 j 18:30	9° 3 06'03	28.95780 AU	minimum elong	-2260 Feb 05 j 06:58	27° 3 59'02	1°07'29
direct	-2269 Oct 08 j 19:09	7° 3 41'42		max. Earth dist.	-2260 Feb 06 j 08:08	28° 3 01'24	30.90010 AU
					-2260 Apr 06 j 13:36	0° 3	
conjunction	-2268 Jan 18 j 09:19	10° 3 09'11	0°-32'-8	retrograde	-2260 May 22 j 17:22	0° 3 33'42	
minimum elong	-2268 Jan 18 j 09:19	10° 3 09'11	0°32'13		-2260 Jul 09 j 02:04	30° R	
max. Earth dist.	-2268 Jan 19 j 07:29	10° 3 11'17	30.95219 AU	min. Earth dist.	-2260 Aug 10 j 08:34	29° 3 10'07	28.89775 AU
retrograde	-2268 May 04 j 06:36	12° 3 43'01		opposition	-2260 Aug 11 j 07:49	29° 3 08'30	-1°-14'-17
min. Earth dist.	-2268 Jul 23 j 05:38	11° 3 19'30	28.94742 AU	direct	-2260 Oct 27 j 22:59	27° 3 45'31	
opposition	-2268 Jul 24 j 03:53	11° 3 17'57	0°-36'-53		-2259 Jan 31 j 19:56	0° 3	
direct	-2268 Oct 10 j 06:47	9° 3 55'00					
				conjunction	-2259 Feb 06 j 19:13	0° 3 13'32	-1°-11'-27
conjunction	-2267 Jan 19 j 20:27	12° 3 22'29	0°-36'-47	minimum elong	-2259 Feb 06 j 19:13	0° 3 13'32	1°11'30
minimum elong	-2267 Jan 19 j 20:27	12° 3 22'29	0°36'51	max. Earth dist.	-2259 Feb 07 j 20:07	0° 3 15'54	30.89368 AU
max. Earth dist.	-2267 Jan 20 j 19:04	12° 3 24'37	30.94220 AU	retrograde	-2259 May 25 j 08:18	2° 3 48'17	
retrograde	-2267 May 06 j 18:31	14° 3 56'26		opposition	-2259 Aug 13 j 20:13	1° 3 23'02	-1°-18'-33
opposition	-2267 Jul 26 j 16:35	13° 3 31'17	0°-41'-49	min. Earth dist.	-2259 Aug 12 j 20:12	1° 3 24'42	28.89088 AU
min. Earth dist.	-2267 Jul 25 j 18:46	13° 3 32'48	28.93816 AU	direct	-2259 Oct 30 j 11:16	0° 3 00'01	
direct	-2267 Oct 12 j 16:41	12° 3 08'18					

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Attention, astronomical year style is used: The year -2258 in astronomical counting style is the year 2259 BCE in historical counting style.

conjunction	-2258 Feb 09 j 07:39	2°28'06"	-1°-15'-22	conjunction	-2250 Feb 27 j 13:24	20°24'03"	-1°-42'-13
minimum elong	-2258 Feb 09 j 07:39	2°28'06"	1°15'26"	minimum elong	-2250 Feb 27 j 13:24	20°24'03"	1°42'16"
max. Earth dist.	-2258 Feb 10 j 08:12	2°30'25"	30.88633 AU	max. Earth dist.	-2250 Feb 28 j 14:34	20°26'26"	30.84986 AU
retrograde	-2258 May 27 j 20:28	5°02'53"		retrograde	-2250 Jun 15 j 07:20	22°59'00"	
min. Earth dist.	-2258 Aug 15 j 09:47	3°39'10"	28.88336 AU	min. Earth dist.	-2250 Sep 02 j 08:36	21°35'15"	28.85089 AU
opposition	-2258 Aug 16 j 08:33	3°37'35"	-1°-22'-41	opposition	-2250 Sep 03 j 08:08	21°33'36"	-1°-50'-48
direct	-2258 Nov 01 j 21:43	2°14'31"		direct	-2250 Nov 19 j 16:37	20°10'15"	
conjunction	-2257 Feb 11 j 20:12	4°42'37"	-1°-19'-11	conjunction	-2249 Mar 02 j 02:43	22°38'56"	-1°-44'-55
minimum elong	-2257 Feb 11 j 20:12	4°42'37"	1°19'14"	minimum elong	-2249 Mar 02 j 02:43	22°38'56"	1°44'58"
max. Earth dist.	-2257 Feb 12 j 21:16	4°44'59"	30.87870 AU	max. Earth dist.	-2249 Mar 03 j 03:24	22°41'16"	30.84939 AU
retrograde	-2257 May 30 j 08:30	7°17'25"		retrograde	-2249 Jun 17 j 20:01	25°13'55"	
opposition	-2257 Aug 18 j 20:39	5°52'05"	-1°-26'-41	opposition	-2249 Sep 05 j 20:04	23°48'32"	-1°-53'-36
min. Earth dist.	-2257 Aug 17 j 20:59	5°53'44"	28.87572 AU	min. Earth dist.	-2249 Sep 04 j 22:04	23°50'05"	28.85040 AU
direct	-2257 Nov 04 j 10:07	4°28'57"		direct	-2249 Nov 22 j 03:26	22°25'11"	
conjunction	-2256 Feb 14 j 08:38	6°57'05"	-1°-22'-52	conjunction	-2248 Mar 03 j 16:12	24°53'58"	-1°-47'-29
minimum elong	-2256 Feb 14 j 08:38	6°57'05"	1°22'56"	minimum elong	-2248 Mar 03 j 16:11	24°53'58"	1°47'32"
max. Earth dist.	-2256 Feb 15 j 08:51	6°59'22"	30.87114 AU	max. Earth dist.	-2248 Mar 04 j 16:49	24°56'17"	30.84862 AU
retrograde	-2256 May 31 j 20:57	9°31'55"		retrograde	-2248 Jun 19 j 09:37	27°28'57"	
min. Earth dist.	-2256 Aug 19 j 09:54	8°08'07"	28.86861 AU	min. Earth dist.	-2248 Sep 06 j 09:24	26°05'10"	28.84925 AU
opposition	-2256 Aug 20 j 08:46	8°06'31"	-1°-30'-34	opposition	-2248 Sep 07 j 07:48	26°03'36"	-1°-56'-15
direct	-2256 Nov 05 j 19:20	6°43'19"		direct	-2248 Nov 23 j 15:50	24°40'13"	
conjunction	-2255 Feb 15 j 21:17	9°11'31"	-1°-26'-26	conjunction	-2247 Mar 06 j 05:42	27°09'05"	-1°-49'-52
minimum elong	-2255 Feb 15 j 21:16	9°11'31"	1°26'29"	minimum elong	-2247 Mar 06 j 05:42	27°09'05"	1°49'54"
max. Earth dist.	-2255 Feb 16 j 22:42	9°13'54"	30.86443 AU	max. Earth dist.	-2247 Mar 07 j 04:48	27°11'16"	30.84696 AU
retrograde	-2255 Jun 03 j 09:19	11°46'21"		retrograde	-2247 Jun 21 j 23:02	29°44'04"	
opposition	-2255 Aug 22 j 20:44	10°20'55"	-1°-34'-19	opposition	-2247 Sep 09 j 19:42	28°18'43"	-1°-58'-43
min. Earth dist.	-2255 Aug 21 j 21:07	10°22'34"	28.86248 AU	min. Earth dist.	-2247 Sep 08 j 22:45	28°20'12"	28.84722 AU
direct	-2255 Nov 08 j 06:48	8°57'39"		direct	-2247 Nov 26 j 01:41	26°55'17"	
conjunction	-2254 Feb 18 j 09:47	11°25'54"	-1°-29'-52	conjunction	-2246 Mar 08 j 19:25	29°24'14"	-1°-52'-5
minimum elong	-2254 Feb 18 j 09:46	11°25'54"	1°29'56"	minimum elong	-2246 Mar 08 j 19:25	29°24'14"	1°52'08"
max. Earth dist.	-2254 Feb 19 j 10:19	11°28'12"	30.85891 AU	max. Earth dist.	-2246 Mar 09 j 18:51	29°26'26"	30.84442 AU
retrograde	-2254 Jun 05 j 23:05	14°00'45"			-2246 Mar 24 j 19:03	0°	
min. Earth dist.	-2254 Aug 24 j 09:24	12°36'56"	28.85775 AU	retrograde	-2246 Jun 24 j 11:16	1°59'11"	
opposition	-2254 Aug 25 j 08:47	12°35'17"	-1°-37'-55	min. Earth dist.	-2246 Sep 11 j 10:27	0°35'18"	28.84417 AU
direct	-2254 Nov 10 j 17:17	11°11'59"		opposition	-2246 Sep 12 j 07:24	0°33'50"	-2°-1'00
conjunction	-2253 Feb 20 j 22:39	13°40'18"	-1°-33'-10		-2246 Oct 02 j 21:32	30°	
minimum elong	-2253 Feb 20 j 22:38	13°40'18"	1°33'13"	direct	-2246 Nov 28 j 13:52	29°10'20"	
max. Earth dist.	-2253 Feb 22 j 00:21	13°42'43"	30.85474 AU		-2245 Jan 22 j 08:10	0°	
retrograde	-2253 Mar 29 j 22:28	15°		conjunction	-2245 Mar 11 j 09:04	1°39'21"	-1°-54'-8
	-2253 Jun 08 j 11:44	16°15'10"		minimum elong	-2245 Mar 11 j 09:04	1°39'21"	1°54'10"
	-2253 Aug 21 j 17:11	15°		max. Earth dist.	-2245 Mar 12 j 06:45	1°41'23"	30.84106 AU
opposition	-2253 Aug 27 j 20:34	14°49'42"	-1°-41'-22	retrograde	-2245 Jun 27 j 00:06	4°14'14"	
min. Earth dist.	-2253 Aug 26 j 21:14	14°51'20"	28.85431 AU	opposition	-2245 Sep 14 j 18:57	2°48'52"	-2°-3'-6
direct	-2253 Nov 13 j 05:26	13°26'22"		min. Earth dist.	-2245 Sep 13 j 22:59	2°50'17"	28.84068 AU
	-2252 Jan 29 j 17:05	15°		direct	-2245 Dec 01 j 00:26	1°25'18"	
conjunction	-2252 Feb 23 j 11:26	15°54'46"	-1°-36'-20	conjunction	-2244 Mar 12 j 22:50	3°54'23"	-1°-56'-1
minimum elong	-2252 Feb 23 j 11:26	15°54'46"	1°36'23"	minimum elong	-2244 Mar 12 j 22:50	3°54'23"	1°56'04"
max. Earth dist.	-2252 Feb 24 j 12:19	15°57'07"	30.85203 AU	max. Earth dist.	-2244 Mar 13 j 21:08	3°56'29"	30.83742 AU
retrograde	-2252 Jun 10 j 02:24	18°29'40"		retrograde	-2244 Jun 28 j 11:53	6°29'13"	
min. Earth dist.	-2252 Aug 28 j 08:42	17°05'52"	28.85231 AU	min. Earth dist.	-2244 Sep 15 j 11:01	5°05'13"	28.83711 AU
opposition	-2252 Aug 29 j 08:28	17°04'12"	-1°-44'-40	opposition	-2244 Sep 16 j 06:29	5°03'50"	-2°-5'00
direct	-2252 Nov 14 j 15:58	15°40'51"		direct	-2244 Dec 02 j 12:32	3°40'11"	
conjunction	-2251 Feb 25 j 00:15	18°09'20"	-1°-39'-21	conjunction	-2243 Mar 15 j 12:19	6°09'20"	-1°-57'-43
minimum elong	-2251 Feb 25 j 00:15	18°09'20"	1°39'23"	minimum elong	-2243 Mar 15 j 12:19	6°09'20"	1°57'44"
max. Earth dist.	-2251 Feb 26 j 01:46	18°11'44"	30.85047 AU	max. Earth dist.	-2243 Mar 16 j 09:19	6°11'18"	30.83413 AU
retrograde	-2251 Jun 12 j 15:45	20°44'16"		retrograde	-2243 Jul 01 j 02:00	8°44'07"	
opposition	-2251 Aug 31 j 20:26	19°18'50"	-1°-47'-49	opposition	-2243 Sep 17 j 17:55	7°18'43"	-2°-6'-44
min. Earth dist.	-2251 Aug 30 j 21:25	19°20'26"	28.85127 AU	min. Earth dist.	-2243 Sep 17 j 22:28	7°20'05"	28.83422 AU
direct	-2251 Nov 17 j 04:09	17°55'29"		direct	-2243 Dec 04 j 23:18	5°55'00"	

Attention, astronomical year style is used: The year -2242 in astronomical counting style is the year 2243 BCE in historical counting style.

conjunction	-2242 Mar 18 j 02:08	8° ✕ 24'14	-1°-59'-14	retrograde	-2234 Jul 21 j 23:35	28° ✕ 59'18	
minimum elong	-2242 Mar 18 j 02:08	8° ✕ 24'14	1°59'16	opposition	-2234 Oct 08 j 22:31	27° ✕ 34'16	-2°-13'-15
max. Earth dist.	-2242 Mar 18 j 23:23	8° ✕ 26'13	30.83155 AU	min. Earth dist.	-2234 Oct 08 j 08:36	27° ✕ 35'15	28.84688 AU
retrograde	-2242 Jul 03 j 14:36	10° ✕ 58'57		direct	-2234 Dec 25 j 07:11	26° ✕ 10'15	
min. Earth dist.	-2242 Sep 20 j 10:47	9° ✕ 34'51	28.83222 AU				
opposition	-2242 Sep 21 j 05:13	9° ✕ 33'33	-2°-8'-15	conjunction	-2233 Apr 08 j 09:14	28° ✕ 40'21	-2°-4'-31
direct	-2242 Dec 07 j 11:51	8° ✕ 09'46		minimum elong	-2233 Apr 08 j 09:14	28° ✕ 40'21	2°04'31
				max. Earth dist.	-2233 Apr 09 j 00:14	28° ✕ 41'45	30.84571 AU
conjunction	-2241 Mar 20 j 15:59	10° ✕ 39'05	-2°00'-34		-2233 May 15 j 15:14	0° Υ	
minimum elong	-2241 Mar 20 j 15:59	10° ✕ 39'05	2°00'36	retrograde	-2233 Jul 24 j 10:43	1° Υ 14'26	
max. Earth dist.	-2241 Mar 21 j 12:30	10° ✕ 41'01	30.83022 AU		-2233 Oct 05 j 04:03	30° ℞ ✕	
retrograde	-2241 Jul 06 j 05:28	13° ✕ 13'45		opposition	-2233 Oct 11 j 09:35	29° ✕ 49'25	-2°-12'-58
opposition	-2241 Sep 23 j 16:27	11° ✕ 48'21	-2°-9'-35	min. Earth dist.	-2233 Oct 10 j 21:12	29° ✕ 50'18	28.84747 AU
min. Earth dist.	-2241 Sep 22 j 21:27	11° ✕ 49'42	28.83153 AU	direct	-2233 Dec 27 j 20:02	28° ✕ 25'19	
direct	-2241 Dec 10 j 00:46	10° ✕ 24'32			-2232 Mar 15 j 16:04	0° Υ	
conjunction	-2240 Mar 22 j 05:42	12° ✕ 53'57	-2°-1'-44	conjunction	-2232 Apr 09 j 23:28	0° Υ 55'28	-2°-4'-9
minimum elong	-2240 Mar 22 j 05:41	12° ✕ 53'57	2°01'46	minimum elong	-2232 Apr 09 j 23:28	0° Υ 55'28	2°04'11
max. Earth dist.	-2240 Mar 23 j 01:54	12° ✕ 55'51	30.83008 AU	max. Earth dist.	-2232 Apr 10 j 13:03	0° Υ 56'44	30.84624 AU
retrograde	-2240 Jul 07 j 17:44	15° ✕ 28'34		retrograde	-2232 Jul 26 j 00:19	3° Υ 29'24	
min. Earth dist.	-2240 Sep 24 j 10:06	14° ✕ 04'28	28.83217 AU	opposition	-2232 Oct 12 j 20:26	2° Υ 04'23	-2°-12'-29
opposition	-2240 Sep 25 j 03:47	14° ✕ 03'13	-2°-10'-43	min. Earth dist.	-2232 Oct 12 j 07:58	2° Υ 05'16	28.84791 AU
direct	-2240 Dec 11 j 11:52	12° ✕ 39'22		direct	-2232 Dec 29 j 09:06	0° Υ 40'11	
conjunction	-2239 Mar 24 j 19:39	15° ✕ 08'53	-2°-2'-42	conjunction	-2231 Apr 12 j 13:49	3° Υ 10'24	-2°-3'-36
minimum elong	-2239 Mar 24 j 19:39	15° ✕ 08'53	2°02'43	minimum elong	-2231 Apr 12 j 13:49	3° Υ 10'24	2°03'37
max. Earth dist.	-2239 Mar 25 j 15:53	15° ✕ 10'47	30.83148 AU	max. Earth dist.	-2231 Apr 13 j 02:43	3° Υ 11'36	30.84671 AU
retrograde	-2239 Jul 10 j 07:59	17° ✕ 43'26		retrograde	-2231 Jul 28 j 12:04	5° Υ 44'11	
opposition	-2239 Sep 27 j 14:53	16° ✕ 18'09	-2°-11'-39	opposition	-2231 Oct 15 j 07:15	4° Υ 19'09	-2°-11'-48
min. Earth dist.	-2239 Sep 26 j 20:40	16° ✕ 19'26	28.83412 AU	min. Earth dist.	-2231 Oct 14 j 20:33	4° Υ 19'55	28.84863 AU
direct	-2239 Dec 14 j 00:25	14° ✕ 54'17		direct	-2231 Dec 31 j 20:35	2° Υ 54'52	
conjunction	-2238 Mar 27 j 09:35	17° ✕ 23'55	-2°-3'-28	conjunction	-2230 Apr 15 j 04:11	5° Υ 25'08	-2°-2'-53
minimum elong	-2238 Mar 27 j 09:35	17° ✕ 23'55	2°03'31	minimum elong	-2230 Apr 15 j 04:12	5° Υ 25'08	2°02'54
max. Earth dist.	-2238 Mar 28 j 04:33	17° ✕ 25'41	30.83393 AU	max. Earth dist.	-2230 Apr 15 j 16:37	5° Υ 26'17	30.84785 AU
retrograde	-2238 Jul 12 j 21:58	19° ✕ 58'26		retrograde	-2230 Jul 31 j 01:54	7° Υ 58'45	
min. Earth dist.	-2238 Sep 29 j 09:20	18° ✕ 34'23	28.83703 AU	opposition	-2230 Oct 17 j 17:53	6° Υ 33'44	-2°-10'-55
opposition	-2238 Sep 30 j 02:08	18° ✕ 33'12	-2°-12'-23	min. Earth dist.	-2230 Oct 17 j 06:54	6° Υ 34'31	28.85010 AU
direct	-2238 Dec 16 j 10:33	17° ✕ 09'20		direct	-2229 Jan 03 j 10:16	5° Υ 09'23	
conjunction	-2237 Mar 29 j 23:50	19° ✕ 39'05	-2°-4'-4	conjunction	-2229 Apr 17 j 18:26	7° Υ 39'42	-2°-1'-58
minimum elong	-2237 Mar 29 j 23:50	19° ✕ 39'05	2°04'05	minimum elong	-2229 Apr 17 j 18:26	7° Υ 39'42	2°01'57
max. Earth dist.	-2237 Mar 30 j 19:03	19° ✕ 40'53	30.83708 AU	max. Earth dist.	-2229 Apr 18 j 05:31	7° Υ 40'44	30.84981 AU
retrograde	-2237 Jul 15 j 09:45	22° ✕ 13'32		retrograde	-2229 Aug 02 j 14:37	10° Υ 13'11	
opposition	-2237 Oct 02 j 13:08	20° ✕ 48'23	-2°-12'-54	opposition	-2229 Oct 20 j 04:35	8° Υ 48'11	-2°-9'-50
min. Earth dist.	-2237 Oct 01 j 20:27	20° ✕ 49'34	28.84021 AU	min. Earth dist.	-2229 Oct 19 j 18:58	8° Υ 48'52	28.85276 AU
direct	-2237 Dec 18 j 22:45	19° ✕ 24'31		direct	-2228 Jan 05 j 21:30	7° Υ 23'46	
conjunction	-2236 Mar 31 j 13:59	21° ✕ 54'22	-2°-4'-27	conjunction	-2228 Apr 19 j 08:44	9° Υ 54'09	-2°00'-52
minimum elong	-2236 Mar 31 j 13:59	21° ✕ 54'22	2°04'29	minimum elong	-2228 Apr 19 j 08:44	9° Υ 54'09	2°00'52
max. Earth dist.	-2236 Apr 01 j 07:17	21° ✕ 55'59	30.84026 AU	max. Earth dist.	-2228 Apr 19 j 20:04	9° Υ 55'12	30.85322 AU
retrograde	-2236 Jul 16 j 22:29	24° ✕ 28'46		retrograde	-2228 Aug 04 j 02:19	12° Υ 27'29	
min. Earth dist.	-2236 Oct 03 j 08:49	23° ✕ 04'46	28.84328 AU	opposition	-2228 Oct 21 j 15:08	11° Υ 02'33	-2°-8'-34
opposition	-2236 Oct 04 j 00:21	23° ✕ 03'40	-2°-13'-13	min. Earth dist.	-2228 Oct 21 j 05:22	11° Υ 03'14	28.85684 AU
direct	-2236 Dec 20 j 08:55	21° ✕ 39'46		direct	-2227 Jan 07 j 10:14	9° Υ 38'05	
conjunction	-2235 Apr 03 j 04:18	24° ✕ 09'43	-2°-4'-40	conjunction	-2227 Apr 21 j 22:49	12° Υ 08'32	-1°-59'-34
minimum elong	-2235 Apr 03 j 04:18	24° ✕ 09'43	2°04'40	minimum elong	-2227 Apr 21 j 22:49	12° Υ 08'32	1°59'34
max. Earth dist.	-2235 Apr 03 j 21:47	24° ✕ 11'22	30.84293 AU	max. Earth dist.	-2227 Apr 22 j 08:28	12° Υ 09'26	30.85814 AU
retrograde	-2235 Jul 19 j 10:12	26° ✕ 44'03		retrograde	-2227 Aug 06 j 14:58	14° Υ 41'46	
opposition	-2235 Oct 06 j 11:31	25° ✕ 19'00	-2°-13'-20	opposition	-2227 Oct 24 j 01:47	13° Υ 16'53	-2°-7'-5
min. Earth dist.	-2235 Oct 05 j 20:59	25° ✕ 20'02	28.84547 AU	min. Earth dist.	-2227 Oct 23 j 16:53	13° Υ 17'31	28.86252 AU
direct	-2235 Dec 22 j 20:24	23° ✕ 55'03		direct	-2226 Jan 09 j 20:32	11° Υ 52'24	
conjunction	-2234 Apr 05 j 18:43	26° ✕ 25'05	-2°-4'-41	conjunction	-2226 Apr 24 j 13:16	14° Υ 22'58	-1°-58'-6
minimum elong	-2234 Apr 05 j 18:43	26° ✕ 25'05	2°04'42	minimum elong	-2226 Apr 24 j 13:17	14° Υ 22'58	1°58'07
max. Earth dist.	-2234 Apr 06 j 10:02	26° ✕ 26'31	30.84477 AU	max. Earth dist.	-2226 Apr 24 j 23:23	14° Υ 23'55	30.86451 AU

Attention, astronomical year style is used: The year -2226 in astronomical counting style is the year 2227 BCE in historical counting style.

retrograde	-2226 Aug 09 j 02:18	16° Υ 56'04		minimum elong	-2218 May 13 j 08:47	2° ♁ 20'08	1°40'08
opposition	-2226 Oct 26 j 12:15	15° Υ 31'18	-2°-5'-25	max. Earth dist.	-2218 May 13 j 08:52	2° ♁ 20'08	30.91699 AU
min. Earth dist.	-2226 Oct 26 j 04:08	15° Υ 31'52	28.86937 AU	retrograde	-2218 Aug 27 j 04:54	4° ♁ 52'03	
direct	-2225 Jan 12 j 07:42	14° Υ 06'48		opposition	-2218 Nov 13 j 00:01	3° ♁ 27'50	-1°-45'-30
				min. Earth dist.	-2218 Nov 12 j 23:38	3° ♁ 27'52	28.92061 AU
conjunction	-2225 Apr 27 j 03:35	16° Υ 37'28	-1°-56'-27	direct	-2217 Jan 30 j 08:40	2° ♁ 03'03	
minimum elong	-2225 Apr 27 j 03:36	16° Υ 37'28	1°56'27				
max. Earth dist.	-2225 Apr 27 j 11:50	16° Υ 38'15	30.87199 AU	conjunction	-2217 May 15 j 23:08	4° ♁ 34'19	-1°-37'-12
retrograde	-2225 Aug 11 j 15:02	19° Υ 10'29		minimum elong	-2217 May 15 j 23:09	4° ♁ 34'19	1°37'10
opposition	-2225 Oct 28 j 22:48	17° Υ 45'49	-2°-3'-33	max. Earth dist.	-2217 May 15 j 23:31	4° ♁ 34'21	30.92262 AU
min. Earth dist.	-2225 Oct 28 j 15:05	17° Υ 46'22	28.87719 AU	retrograde	-2217 Aug 29 j 15:39	7° ♁ 06'02	
direct	-2224 Jan 14 j 18:02	16° Υ 21'20		opposition	-2217 Nov 15 j 10:21	5° ♁ 41'52	-1°-42'-16
				min. Earth dist.	-2217 Nov 15 j 10:46	5° ♁ 41'50	28.92656 AU
conjunction	-2224 Apr 28 j 17:57	18° Υ 52'06	-1°-54'-37	direct	-2216 Feb 01 j 20:49	4° ♁ 17'02	
minimum elong	-2224 Apr 28 j 17:57	18° Υ 52'06	1°54'38				
max. Earth dist.	-2224 Apr 29 j 02:10	18° Υ 52'52	30.87994 AU	conjunction	-2216 May 17 j 13:03	6° ♁ 48'18	-1°-34'-6
retrograde	-2224 Aug 13 j 01:38	21° Υ 25'01		minimum elong	-2216 May 17 j 13:03	6° ♁ 48'18	1°34'05
opposition	-2224 Oct 30 j 09:26	20° Υ 00'27	-2°-1'-30	max. Earth dist.	-2216 May 17 j 11:39	6° ♁ 48'10	30.92919 AU
min. Earth dist.	-2224 Oct 30 j 03:18	20° Υ 00'53	28.88511 AU	retrograde	-2216 Aug 31 j 02:59	9° ♁ 19'51	
direct	-2223 Jan 16 j 06:00	18° Υ 35'58		opposition	-2216 Nov 16 j 20:35	7° ♁ 55'44	-1°-38'-53
				min. Earth dist.	-2216 Nov 16 j 21:11	7° ♁ 55'41	28.93374 AU
conjunction	-2223 May 01 j 08:26	21° Υ 06'52	-1°-52'-37	direct	-2215 Feb 03 j 08:02	6° ♁ 30'50	
minimum elong	-2223 May 01 j 08:26	21° Υ 06'52	1°52'37				
max. Earth dist.	-2223 May 01 j 14:50	21° Υ 07'27	30.88784 AU	conjunction	-2215 May 20 j 03:15	9° ♁ 02'09	-1°-30'-52
retrograde	-2223 Aug 15 j 15:05	23° Υ 39'39		minimum elong	-2215 May 20 j 03:16	9° ♁ 02'09	1°30'51
opposition	-2223 Nov 01 j 19:50	22° Υ 15'11	-1°-59'-16	max. Earth dist.	-2215 May 20 j 02:04	9° ♁ 02'03	30.93700 AU
min. Earth dist.	-2223 Nov 01 j 13:55	22° Υ 15'36	28.89267 AU	retrograde	-2215 Sep 02 j 12:18	11° ♁ 33'31	
direct	-2222 Jan 18 j 18:14	20° Υ 50'41		opposition	-2215 Nov 19 j 06:47	10° ♁ 09'28	-1°-35'-21
				min. Earth dist.	-2215 Nov 19 j 08:42	10° ♁ 09'20	28.94217 AU
conjunction	-2222 May 03 j 23:05	23° Υ 21'41	-1°-50'-27	direct	-2214 Feb 05 j 19:27	8° ♁ 44'33	
minimum elong	-2222 May 03 j 23:06	23° Υ 21'41	1°50'27				
max. Earth dist.	-2222 May 04 j 04:26	23° Υ 22'11	30.89495 AU	conjunction	-2214 May 22 j 17:21	11° ♁ 15'55	-1°-27'-29
retrograde	-2222 Aug 18 j 02:36	25° Υ 54'20		minimum elong	-2214 May 22 j 17:21	11° ♁ 15'55	1°27'28
opposition	-2222 Nov 04 j 06:32	24° Υ 29'57	-1°-56'-51	max. Earth dist.	-2214 May 22 j 14:36	11° ♁ 15'40	30.94625 AU
min. Earth dist.	-2222 Nov 04 j 02:43	24° Υ 30'13	28.89933 AU	retrograde	-2214 Sep 05 j 00:57	13° ♁ 47'07	
direct	-2221 Jan 21 j 05:31	23° Υ 05'24		opposition	-2214 Nov 21 j 16:58	12° ♁ 23'10	-1°-31'-40
				min. Earth dist.	-2214 Nov 21 j 18:36	12° ♁ 23'03	28.95196 AU
conjunction	-2221 May 06 j 13:37	25° Υ 36'29	-1°-48'-6	direct	-2213 Feb 08 j 06:45	10° ♁ 58'13	
minimum elong	-2221 May 06 j 13:38	25° Υ 36'29	1°48'05				
max. Earth dist.	-2221 May 06 j 17:49	25° Υ 36'52	30.90125 AU	conjunction	-2213 May 25 j 07:22	13° ♁ 29'40	-1°-23'-59
retrograde	-2221 Aug 20 j 16:07	28° Υ 08'58		minimum elong	-2213 May 25 j 07:23	13° ♁ 29'40	1°23'58
opposition	-2221 Nov 06 j 16:56	26° Υ 44'38	-1°-54'-16	max. Earth dist.	-2213 May 25 j 04:16	13° ♁ 29'22	30.95656 AU
min. Earth dist.	-2221 Nov 06 j 13:16	26° Υ 44'54	28.90509 AU		-2213 Jul 07 j 14:18	15° ♁	
direct	-2220 Jan 23 j 19:44	25° Υ 20'03		retrograde	-2213 Sep 07 j 10:53	16° ♁ 00'43	
					-2213 Nov 10 j 08:36	15° ♁	
conjunction	-2220 May 08 j 04:03	27° Υ 51'11	-1°-45'-36	opposition	-2213 Nov 24 j 03:15	14° ♁ 36'52	-1°-27'-51
minimum elong	-2220 May 08 j 04:04	27° Υ 51'11	1°45'36	min. Earth dist.	-2213 Nov 24 j 06:38	14° ♁ 36'37	28.96268 AU
max. Earth dist.	-2220 May 08 j 06:33	27° Υ 51'25	30.90671 AU	direct	-2212 Feb 10 j 17:34	13° ♁ 11'55	
	-2220 Jul 15 j 11:37	0° ♁			-2212 May 07 j 02:52	15° ♁	
retrograde	-2220 Aug 22 j 04:25	0° ♁ 23'31					
	-2220 Sep 29 j 06:16	30° ♁		conjunction	-2212 May 26 j 21:25	15° ♁ 43'26	-1°-20'-20
opposition	-2220 Nov 08 j 03:26	28° Υ 59'13	-1°-51'-30	minimum elong	-2212 May 26 j 21:25	15° ♁ 43'26	1°20'20
min. Earth dist.	-2220 Nov 08 j 01:34	28° Υ 59'21	28.91034 AU	max. Earth dist.	-2212 May 26 j 17:25	15° ♁ 43'04	30.96771 AU
direct	-2219 Jan 25 j 07:49	27° Υ 34'34		retrograde	-2212 Sep 08 j 23:17	18° ♁ 14'21	
	-2219 May 08 j 04:37	0° ♁		opposition	-2212 Nov 25 j 13:22	16° ♁ 50'36	-1°-23'-54
				min. Earth dist.	-2212 Nov 25 j 16:45	16° ♁ 50'22	28.97383 AU
conjunction	-2219 May 10 j 18:28	0° ♁ 05'45	-1°-42'-57	direct	-2211 Feb 12 j 07:12	15° ♁ 25'40	
minimum elong	-2219 May 10 j 18:28	0° ♁ 05'45	1°42'56				
max. Earth dist.	-2219 May 10 j 20:37	0° ♁ 05'57	30.91189 AU	conjunction	-2211 May 29 j 11:28	17° ♁ 57'16	-1°-16'-35
retrograde	-2219 Aug 24 j 16:06	2° ♁ 37'53		minimum elong	-2211 May 29 j 11:28	17° ♁ 57'16	1°16'33
opposition	-2219 Nov 10 j 13:46	1° ♁ 13'37	-1°-48'-35	max. Earth dist.	-2211 May 29 j 06:02	17° ♁ 56'45	30.97877 AU
min. Earth dist.	-2219 Nov 10 j 12:14	1° ♁ 13'44	28.91530 AU	retrograde	-2211 Sep 11 j 11:03	20° ♁ 28'02	
	-2218 Jan 01 j 23:07	30° ♁		opposition	-2211 Nov 27 j 23:43	19° ♁ 04'23	-1°-19'-49
direct	-2218 Jan 27 j 21:17	29° Υ 48'55		min. Earth dist.	-2211 Nov 28 j 04:55	19° ♁ 04'01	28.98467 AU
	-2218 Feb 22 j 11:54	0° ♁		direct	-2210 Feb 14 j 18:51	17° ♁ 39'27	
conjunction	-2218 May 13 j 08:47	2° ♁ 20'07	-1°-40'-9	conjunction	-2210 Jun 01 j 01:39	20° ♁ 11'07	-1°-12'-43

Attention, astronomical year style is used: The year -2210 in astronomical counting style is the year 2211 BCE in historical counting style.

minimum elong	-2210 Jun 01 j 01:40	20° 8 11'07	1°12'41	minimum elong	-2202 Jun 19 j 15:08	7° II 57'44	0°38'29
max. Earth dist.	-2210 May 31 j 19:36	20° 8 10'33	30.98922 AU	max. Earth dist.	-2202 Jun 19 j 00:56	7° II 56'25	31.05036 AU
retrograde	-2210 Sep 13 j 22:55	22° 8 41'43		retrograde	-2202 Oct 01 j 13:04	10° II 26'55	
opposition	-2210 Nov 30 j 09:57	21° 8 18'10	-1°-15'-37	opposition	-2202 Dec 17 j 19:35	9° II 03'50	0°-38'-45
min. Earth dist.	-2210 Nov 30 j 15:43	21° 8 17'46	28.99448 AU	min. Earth dist.	-2202 Dec 18 j 08:12	9° II 02'57	29.05549 AU
direct	-2209 Feb 17 j 08:18	19° 8 53'14		direct	-2201 Mar 07 j 07:43	7° II 38'34	
conjunction	-2209 Jun 03 j 15:42	22° 8 24'57	-1°-8'-44	conjunction	-2201 Jun 22 j 04:24	10° II 10'28	0°-33'-56
minimum elong	-2209 Jun 03 j 15:42	22° 8 24'57	1°08'42	minimum elong	-2201 Jun 22 j 04:24	10° II 10'28	0°33'55
max. Earth dist.	-2209 Jun 03 j 07:22	22° 8 24'10	30.99854 AU	max. Earth dist.	-2201 Jun 21 j 14:15	10° II 09'09	31.06042 AU
retrograde	-2209 Sep 16 j 11:52	24° 8 55'23		retrograde	-2201 Oct 04 j 00:17	12° II 39'30	
opposition	-2209 Dec 02 j 20:21	23° 8 31'54	-1°-11'-19	opposition	-2201 Dec 20 j 05:44	11° II 16'31	0°-33'-49
min. Earth dist.	-2209 Dec 03 j 03:22	23° 8 31'25	29.00329 AU	min. Earth dist.	-2201 Dec 20 j 18:19	11° II 15'38	29.06595 AU
direct	-2208 Feb 19 j 20:13	22° 8 06'56		direct	-2200 Mar 08 j 20:41	9° II 51'16	
conjunction	-2208 Jun 05 j 05:38	24° 8 38'41	-1°-4'-39	conjunction	-2200 Jun 23 j 17:22	12° II 23'13	0°-29'-18
minimum elong	-2208 Jun 05 j 05:38	24° 8 38'41	1°04'38	minimum elong	-2200 Jun 23 j 17:23	12° II 23'13	0°29'16
max. Earth dist.	-2208 Jun 04 j 21:14	24° 8 37'54	31.00679 AU	max. Earth dist.	-2200 Jun 23 j 01:44	12° II 21'46	31.07136 AU
retrograde	-2208 Sep 17 j 22:22	27° 8 08'56		retrograde	-2200 Oct 05 j 13:12	14° II 52'08	
opposition	-2208 Dec 04 j 06:41	25° 8 45'32	-1°-6'-54	opposition	-2200 Dec 21 j 15:55	13° II 29'14	0°-28'-51
min. Earth dist.	-2208 Dec 04 j 14:56	25° 8 44'57	29.01089 AU	min. Earth dist.	-2200 Dec 22 j 05:19	13° II 28'18	29.07719 AU
direct	-2207 Feb 21 j 09:14	24° 8 20'31		direct	-2199 Mar 11 j 08:55	12° II 04'01	
conjunction	-2207 Jun 07 j 19:30	26° 8 52'17	-1°00'-29	conjunction	-2199 Jun 26 j 06:39	14° II 36'00	0°-24'-38
minimum elong	-2207 Jun 07 j 19:30	26° 8 52'17	1°00'28	minimum elong	-2199 Jun 26 j 06:39	14° II 36'00	0°24'36
max. Earth dist.	-2207 Jun 07 j 08:50	26° 8 51'18	31.01406 AU	max. Earth dist.	-2199 Jun 25 j 15:18	14° II 34'35	31.08265 AU
retrograde	-2207 Sep 20 j 09:48	29° 8 22'21		retrograde	-2199 Oct 07 j 23:23	17° II 04'47	
opposition	-2207 Dec 06 j 16:47	27° 8 59'00	-1°-2'-25	opposition	-2199 Dec 24 j 02:06	15° II 42'00	0°-23'-50
min. Earth dist.	-2207 Dec 07 j 01:35	27° 8 58'23	29.01778 AU	min. Earth dist.	-2199 Dec 24 j 16:35	15° II 40'59	29.08831 AU
direct	-2206 Feb 23 j 21:03	26° 8 33'56		direct	-2198 Mar 13 j 22:10	14° II 16'48	
conjunction	-2206 Jun 10 j 09:26	29° 8 05'44	0°-56'-14	conjunction	-2198 Jun 28 j 19:43	16° II 48'49	0°-19'-55
minimum elong	-2206 Jun 10 j 09:27	29° 8 05'44	0°56'13	minimum elong	-2198 Jun 28 j 19:44	16° II 48'49	0°19'53
max. Earth dist.	-2206 Jun 09 j 22:44	29° 8 04'45	31.02066 AU	max. Earth dist.	-2198 Jun 28 j 02:25	16° II 47'14	31.09357 AU
retrograde	-2206 Jul 05 j 06:50	0° II		retrograde	-2198 Oct 10 j 11:13	19° II 17'28	
opposition	-2206 Sep 22 j 18:55	1° II 35'36		opposition	-2198 Dec 26 j 12:24	17° II 54'47	0°-18'-47
min. Earth dist.	-2206 Dec 09 j 03:04	0° II 12'18	0°-57'-49	min. Earth dist.	-2198 Dec 27 j 03:11	17° II 53'45	29.09891 AU
direct	-2206 Dec 09 j 13:28	0° II 11'34	29.02419 AU	direct	-2197 Mar 16 j 09:56	16° II 29'34	
conjunction	-2205 Feb 26 j 08:47	28° 8 47'11		conjunction	-2197 Jul 01 j 08:45	19° II 01'38	0°-15'-11
minimum elong	-2205 May 06 j 15:58	0° II		minimum elong	-2197 Jul 01 j 08:45	19° II 01'38	0°15'10
behind sun begin	-2205 Jun 12 j 22:54	1° II 18'59	0°-51'-55	behind sun begin	-2197 Jul 01 j 06:50	19° II 01'27	
behind sun end	-2205 Jun 12 j 22:55	1° II 18'59	0°51'53	behind sun end	-2197 Jul 01 j 10:41	19° II 01'48	
max. Earth dist.	-2205 Jun 12 j 10:31	1° II 17'50	31.02716 AU	max. Earth dist.	-2197 Jun 30 j 15:36	19° II 00'03	31.10360 AU
retrograde	-2205 Sep 25 j 06:41	3° II 48'40		retrograde	-2197 Oct 12 j 20:48	21° II 30'08	
opposition	-2205 Dec 11 j 13:10	2° II 25'24	0°-53'-10	opposition	-2197 Dec 28 j 22:52	20° II 07'31	0°-13'-42
min. Earth dist.	-2205 Dec 11 j 23:19	2° II 24'41	29.03076 AU	min. Earth dist.	-2197 Dec 29 j 15:14	20° II 06'22	29.10841 AU
direct	-2204 Feb 28 j 20:07	1° II 00'13		direct	-2196 Mar 17 j 22:02	18° II 42'18	
conjunction	-2204 Jun 14 j 12:26	3° II 32'02	0°-47'-31	conjunction	-2196 Jul 02 j 21:38	21° II 14'21	0°-10'-27
minimum elong	-2204 Jun 14 j 12:27	3° II 32'02	0°47'29	minimum elong	-2196 Jul 02 j 21:39	21° II 14'21	0°10'25
behind sun begin	-2204 Jun 13 j 23:49	3° II 30'52	31.03393 AU	behind sun begin	-2196 Jul 02 j 16:31	21° II 13'53	
behind sun end	-2204 Jun 13 j 23:49	3° II 30'52	31.03393 AU	behind sun end	-2196 Jul 03 j 02:46	21° II 14'48	
max. Earth dist.	-2204 Sep 26 j 15:23	6° II 01'33		max. Earth dist.	-2196 Jul 02 j 02:39	21° II 12'35	31.11260 AU
retrograde	-2204 Dec 12 j 23:18	4° II 38'20	0°-48'-25	retrograde	-2196 Oct 14 j 08:25	23° II 42'41	
opposition	-2204 Dec 13 j 11:06	4° II 37'30	29.03795 AU	opposition	-2196 Dec 30 j 09:02	22° II 20'08	0°-8'-37
min. Earth dist.	-2204 Dec 13 j 11:06	4° II 37'30	29.03795 AU	min. Earth dist.	-2196 Dec 31 j 01:18	22° II 18'59	29.11683 AU
direct	-2203 Mar 02 j 07:05	3° II 13'07		direct	-2195 Mar 20 j 09:46	20° II 54'52	
conjunction	-2203 Jun 17 j 01:49	5° II 44'56	0°-43'-3	conjunction	-2195 Jul 05 j 10:37	23° II 26'55	0°-5'-42
minimum elong	-2203 Jun 17 j 01:49	5° II 44'56	0°43'01	minimum elong	-2195 Jul 05 j 10:37	23° II 26'55	0°05'40
behind sun begin	-2203 Jun 16 j 12:26	5° II 43'42	31.04166 AU	behind sun begin	-2195 Jul 05 j 04:19	23° II 26'21	
behind sun end	-2203 Sep 29 j 02:24	8° II 14'16		behind sun end	-2195 Jul 05 j 16:55	23° II 27'28	
max. Earth dist.	-2203 Dec 15 j 09:23	6° II 51'07	0°-43'-37	max. Earth dist.	-2195 Jul 04 j 15:11	23° II 25'07	31.12039 AU
retrograde	-2203 Dec 15 j 20:48	6° II 50'19	29.04609 AU	retrograde	-2195 Oct 16 j 16:32	25° II 55'06	
opposition	-2202 Mar 04 j 20:40	5° II 25'52		opposition	-2194 Jan 01 j 19:30	24° II 32'34	0°-3'-31
conjunction	-2202 Jun 19 j 15:07	7° II 57'44	0°-38'-31	min. Earth dist.	-2194 Jan 02 j 13:35	24° II 31'18	29.12415 AU

Attention, astronomical year style is used: The year -2194 in astronomical counting style is the year 2195 BCE in historical counting style.

direct	-2194 Mar 22 j 21:07	23°II07'17		retrograde	-2188 Oct 31 j 16:42	11°☾16'40	
				opposition	-2187 Jan 16 j 19:56	9°☾54'26	0°31'43
conjunction	-2194 Jul 07 j 23:18	25°II39'17	0°00'-54	min. Earth dist.	-2187 Jan 17 j 16:29	9°☾53'00	29.17877 AU
minimum elong	-2194 Jul 07 j 23:19	25°II39'17	0°00'51	direct	-2187 Apr 07 j 11:12	8°☾29'04	
behind sun begin	-2194 Jul 07 j 16:46	25°II38'42					
behind sun end	-2194 Jul 08 j 05:52	25°II39'52		conjunction	-2187 Jul 23 j 12:34	11°☾00'58	0°32'03
max. Earth dist.	-2194 Jul 07 j 02:57	25°II37'24	31.12733 AU	minimum elong	-2187 Jul 23 j 12:33	11°☾00'58	0°32'05
asc. node	-2194 Sep 13 j 19:02	27°II46'05		max. Earth dist.	-2187 Jul 22 j 13:40	10°☾58'50	31.18388 AU
retrograde	-2194 Oct 19 j 02:31	28°II07'17		retrograde	-2187 Nov 03 j 04:24	13°☾28'07	
opposition	-2193 Jan 04 j 05:46	26°II44'48	0°01'34	opposition	-2186 Jan 19 j 06:22	12°☾06'00	0°36'37
min. Earth dist.	-2193 Jan 04 j 23:40	26°II43'33	29.13068 AU	min. Earth dist.	-2186 Jan 20 j 02:18	12°☾04'36	29.18953 AU
direct	-2193 Mar 25 j 10:06	25°II19'28		direct	-2186 Apr 09 j 22:53	10°☾40'40	
				max. Earth dist.	-2186 Jul 25 j 01:44	13°☾10'29	31.19444 AU
conjunction	-2193 Jul 10 j 11:54	27°II51'26	0°03'57				
minimum elong	-2193 Jul 10 j 11:54	27°II51'26	0°04'00	conjunction	-2186 Jul 26 j 00:27	13°☾12'35	0°36'36
behind sun begin	-2193 Jul 10 j 05:25	27°II50'51		minimum elong	-2186 Jul 26 j 00:27	13°☾12'35	0°36'40
behind sun end	-2193 Jul 10 j 18:23	27°II52'00		retrograde	-2186 Nov 05 j 12:45	15°☾39'42	
max. Earth dist.	-2193 Jul 09 j 14:44	27°II49'28	31.13363 AU	opposition	-2185 Jan 21 j 17:05	14°☾17'39	0°41'28
	-2193 Sep 17 j 21:52	0°☾		min. Earth dist.	-2185 Jan 22 j 14:30	14°☾16'10	29.19998 AU
retrograde	-2193 Oct 21 j 12:27	0°☾19'17		direct	-2185 Apr 12 j 09:40	12°☾52'23	
	-2193 Nov 24 j 18:05	30°RII					
opposition	-2192 Jan 06 j 16:08	28°II56'48	0°06'39	conjunction	-2185 Jul 28 j 12:16	15°☾24'18	0°41'07
min. Earth dist.	-2192 Jan 07 j 11:17	28°II55'27	29.13702 AU	minimum elong	-2185 Jul 28 j 12:16	15°☾24'18	0°41'09
direct	-2192 Mar 26 j 20:36	27°II31'24		max. Earth dist.	-2185 Jul 27 j 12:55	15°☾22'08	31.20454 AU
	-2192 Jul 10 j 12:22	0°☾		retrograde	-2185 Nov 07 j 22:48	17°☾51'20	
max. Earth dist.	-2192 Jul 11 j 03:13	0°☾01'23	31.13999 AU	opposition	-2184 Jan 24 j 03:42	16°☾29'23	0°46'15
				min. Earth dist.	-2184 Jan 25 j 00:45	16°☾27'55	29.20961 AU
conjunction	-2192 Jul 12 j 00:16	0°☾03'20	0°08'41	direct	-2184 Apr 13 j 21:36	15°☾04'09	
minimum elong	-2192 Jul 12 j 00:16	0°☾03'20	0°08'45	max. Earth dist.	-2184 Jul 28 j 23:57	17°☾33'50	31.21352 AU
behind sun begin	-2192 Jul 11 j 18:37	0°☾02'50					
behind sun end	-2192 Jul 12 j 05:54	0°☾03'50		conjunction	-2184 Jul 30 j 00:01	17°☾36'04	0°45'34
retrograde	-2192 Oct 22 j 22:26	2°☾31'01		minimum elong	-2184 Jul 30 j 00:01	17°☾36'04	0°45'37
opposition	-2191 Jan 08 j 02:27	1°☾08'34	0°11'43	retrograde	-2184 Nov 09 j 08:59	20°☾03'02	
min. Earth dist.	-2191 Jan 08 j 21:33	1°☾07'13	29.14344 AU	opposition	-2183 Jan 25 j 14:30	18°☾41'08	0°50'58
	-2191 Feb 24 j 15:38	30°RII		min. Earth dist.	-2183 Jan 26 j 12:44	18°☾39'35	29.21812 AU
direct	-2191 Mar 29 j 10:13	29°II43'08		direct	-2183 Apr 16 j 07:08	17°☾15'55	
	-2191 Apr 30 j 20:49	0°☾		max. Earth dist.	-2183 Jul 31 j 11:45	19°☾45'34	31.22133 AU
conjunction	-2191 Jul 14 j 12:31	2°☾15'01	0°13'24	conjunction	-2183 Aug 01 j 11:47	19°☾47'48	0°49'57
minimum elong	-2191 Jul 14 j 12:31	2°☾15'01	0°13'27	minimum elong	-2183 Aug 01 j 11:47	19°☾47'48	0°49'59
behind sun begin	-2191 Jul 14 j 08:54	2°☾14'42		retrograde	-2183 Nov 11 j 18:44	22°☾14'42	
behind sun end	-2191 Jul 14 j 16:07	2°☾15'20		opposition	-2182 Jan 28 j 01:14	20°☾52'50	0°55'37
max. Earth dist.	-2191 Jul 13 j 14:12	2°☾12'57	31.14668 AU	min. Earth dist.	-2182 Jan 28 j 23:35	20°☾51'17	29.22523 AU
retrograde	-2191 Oct 25 j 10:06	4°☾42'34		direct	-2182 Apr 18 j 20:45	19°☾27'37	
opposition	-2190 Jan 10 j 12:42	3°☾20'07	0°16'46				
min. Earth dist.	-2190 Jan 11 j 08:11	3°☾18'46	29.15065 AU	conjunction	-2182 Aug 03 j 23:23	21°☾59'28	0°54'15
direct	-2190 Mar 31 j 22:17	1°☾54'40		minimum elong	-2182 Aug 03 j 23:22	21°☾59'28	0°54'18
max. Earth dist.	-2190 Jul 16 j 03:19	4°☾24'34	31.15434 AU	max. Earth dist.	-2182 Aug 02 j 21:59	21°☾57'07	31.22784 AU
				retrograde	-2182 Nov 14 j 06:34	24°☾26'17	
conjunction	-2190 Jul 17 j 00:46	4°☾26'33	0°18'06	opposition	-2181 Jan 30 j 12:06	23°☾04'25	1°00'10
minimum elong	-2190 Jul 17 j 00:46	4°☾26'33	0°18'10	min. Earth dist.	-2181 Jan 31 j 10:50	23°☾02'51	29.23134 AU
retrograde	-2190 Oct 27 j 19:34	6°☾53'58		direct	-2181 Apr 21 j 08:28	21°☾39'12	
opposition	-2189 Jan 12 j 23:12	5°☾31'34	0°21'47	max. Earth dist.	-2181 Aug 05 j 10:08	24°☾08'43	31.23339 AU
min. Earth dist.	-2189 Jan 13 j 19:07	5°☾30'11	29.15886 AU				
direct	-2189 Apr 03 j 11:31	4°☾06'07		conjunction	-2181 Aug 06 j 10:46	24°☾11'00	0°58'28
				minimum elong	-2181 Aug 06 j 10:46	24°☾11'00	0°58'30
conjunction	-2189 Jul 19 j 12:36	6°☾37'59	0°22'47	retrograde	-2181 Nov 16 j 15:37	26°☾37'43	
minimum elong	-2189 Jul 19 j 12:36	6°☾37'59	0°22'49	opposition	-2180 Feb 01 j 22:59	25°☾15'52	1°04'38
max. Earth dist.	-2189 Jul 18 j 13:59	6°☾35'53	31.16321 AU	min. Earth dist.	-2180 Feb 02 j 22:25	25°☾14'15	29.23647 AU
retrograde	-2189 Oct 30 j 07:08	9°☾05'18		direct	-2180 Apr 22 j 21:28	23°☾50'38	
opposition	-2188 Jan 15 j 09:33	7°☾42'59	0°26'46				
min. Earth dist.	-2188 Jan 16 j 04:59	7°☾41'38	29.16839 AU	conjunction	-2180 Aug 07 j 21:59	26°☾22'21	1°02'36
direct	-2188 Apr 04 j 23:09	6°☾17'33		minimum elong	-2180 Aug 07 j 21:59	26°☾22'21	1°02'39
max. Earth dist.	-2188 Jul 20 j 02:57	8°☾47'25	31.17319 AU	max. Earth dist.	-2180 Aug 06 j 20:08	26°☾19'57	31.23828 AU
				retrograde	-2180 Nov 18 j 03:13	28°☾48'59	
conjunction	-2188 Jul 21 j 00:40	8°☾49'26	0°27'26	opposition	-2179 Feb 03 j 09:38	27°☾27'07	1°09'00
minimum elong	-2188 Jul 21 j 00:40	8°☾49'26	0°27'29	min. Earth dist.	-2179 Feb 04 j 08:38	27°☾25'32	29.24130 AU

Attention, astronomical year style is used: The year -2179 in astronomical counting style is the year 2180 BCE in historical counting style.

direct	-2179 Apr 25 j 09:44	26° $\overline{50}$ 1'51		opposition	-2171 Feb 21 j 02:27	14° $\overline{0}$ 54'20	1°39'49
max. Earth dist.	-2179 Aug 09 j 08:24	28° $\overline{5}$ 31'12	31.24297 AU	min. Earth dist.	-2171 Feb 22 j 01:45	14° $\overline{0}$ 52'44	29.29343 AU
				direct	-2171 May 13 j 08:02	13° $\overline{0}$ 29'22	
conjunction	-2179 Aug 10 j 09:15	28° $\overline{5}$ 33'31	1°06'39		-2171 Jul 31 j 03:10	15° $\overline{0}$	
minimum elong	-2179 Aug 10 j 09:15	28° $\overline{5}$ 33'31	1°06'41				
	-2179 Sep 20 j 14:27	0° $\overline{0}$		conjunction	-2171 Aug 27 j 23:12	16° $\overline{0}$ 00'39	1°35'01
retrograde	-2179 Nov 20 j 12:54	1° $\overline{0}$ 00'02		minimum elong	-2171 Aug 27 j 23:12	16° $\overline{0}$ 00'38	1°35'03
	-2178 Jan 23 j 12:07	30° \overline{R} $\overline{5}$		max. Earth dist.	-2171 Aug 26 j 22:13	15° $\overline{0}$ 58'19	31.29464 AU
opposition	-2178 Feb 05 j 20:37	29° $\overline{5}$ 38'10	1°13'16	retrograde	-2171 Dec 07 j 22:18	18° $\overline{0}$ 26'59	
min. Earth dist.	-2178 Feb 06 j 20:28	29° $\overline{5}$ 36'32	29.24618 AU	opposition	-2170 Feb 23 j 13:54	17° $\overline{0}$ 05'22	1°43'05
direct	-2178 Apr 27 j 23:15	28° $\overline{5}$ 12'54		min. Earth dist.	-2170 Feb 24 j 12:36	17° $\overline{0}$ 03'49	29.29768 AU
	-2178 Jul 23 j 15:31	0° $\overline{0}$		direct	-2170 May 15 j 20:07	15° $\overline{0}$ 40'26	
				max. Earth dist.	-2170 Aug 29 j 09:43	18° $\overline{0}$ 09'25	31.29801 AU
conjunction	-2178 Aug 12 j 20:05	0° $\overline{0}$ 44'29	1°10'35				
minimum elong	-2178 Aug 12 j 20:04	0° $\overline{0}$ 44'29	1°10'38	conjunction	-2170 Aug 30 j 09:44	18° $\overline{0}$ 11'39	1°38'00
max. Earth dist.	-2178 Aug 11 j 18:37	0° $\overline{0}$ 42'07	31.24810 AU	minimum elong	-2170 Aug 30 j 09:44	18° $\overline{0}$ 11'39	1°38'02
retrograde	-2178 Nov 22 j 23:51	3° $\overline{0}$ 10'56		retrograde	-2170 Dec 10 j 08:30	20° $\overline{0}$ 38'00	
opposition	-2177 Feb 08 j 07:32	1° $\overline{0}$ 49'04	1°17'26	opposition	-2169 Feb 26 j 01:33	19° $\overline{0}$ 16'22	1°46'11
min. Earth dist.	-2177 Feb 09 j 06:09	1° $\overline{0}$ 47'30	29.25172 AU	min. Earth dist.	-2169 Feb 27 j 01:12	19° $\overline{0}$ 14'45	29.30039 AU
direct	-2177 Apr 30 j 12:05	0° $\overline{0}$ 23'48		direct	-2169 May 18 j 09:29	17° $\overline{0}$ 51'28	
max. Earth dist.	-2177 Aug 14 j 06:17	2° $\overline{0}$ 53'01	31.25400 AU				
				conjunction	-2169 Sep 01 j 20:07	20° $\overline{0}$ 22'37	1°40'50
conjunction	-2177 Aug 15 j 07:02	2° $\overline{0}$ 55'19	1°14'26	minimum elong	-2169 Sep 01 j 20:07	20° $\overline{0}$ 22'37	1°40'52
minimum elong	-2177 Aug 15 j 07:02	2° $\overline{0}$ 55'19	1°14'27	max. Earth dist.	-2169 Aug 31 j 19:21	20° $\overline{0}$ 20'18	31.30007 AU
retrograde	-2177 Nov 25 j 08:01	5° $\overline{0}$ 21'42		retrograde	-2169 Dec 12 j 19:44	22° $\overline{0}$ 48'57	
opposition	-2176 Feb 10 j 18:31	3° $\overline{0}$ 59'52	1°21'28	opposition	-2168 Feb 28 j 12:54	21° $\overline{0}$ 27'18	1°49'09
min. Earth dist.	-2176 Feb 11 j 17:57	3° $\overline{0}$ 58'15	29.25826 AU	min. Earth dist.	-2168 Feb 29 j 11:30	21° $\overline{0}$ 25'45	29.30185 AU
direct	-2176 May 01 j 23:03	2° $\overline{0}$ 34'37		direct	-2168 May 19 j 22:24	20° $\overline{0}$ 02'23	
				max. Earth dist.	-2168 Sep 02 j 06:10	22° $\overline{0}$ 31'12	31.30090 AU
conjunction	-2176 Aug 16 j 17:49	5° $\overline{0}$ 06'05	1°18'10				
minimum elong	-2176 Aug 16 j 17:49	5° $\overline{0}$ 06'05	1°18'13	conjunction	-2168 Sep 03 j 06:29	22° $\overline{0}$ 33'28	1°43'32
max. Earth dist.	-2176 Aug 15 j 17:11	5° $\overline{0}$ 03'48	31.26101 AU	minimum elong	-2168 Sep 03 j 06:29	22° $\overline{0}$ 33'28	1°43'35
retrograde	-2176 Nov 26 j 17:42	7° $\overline{0}$ 32'26		retrograde	-2168 Dec 14 j 04:18	24° $\overline{0}$ 59'47	
opposition	-2175 Feb 12 j 05:29	6° $\overline{0}$ 10'38	1°25'24	opposition	-2167 Mar 02 j 00:31	23° $\overline{0}$ 38'07	1°51'56
min. Earth dist.	-2175 Feb 13 j 03:54	6° $\overline{0}$ 09'05	29.26556 AU	min. Earth dist.	-2167 Mar 03 j 00:03	23° $\overline{0}$ 36'30	29.30235 AU
direct	-2175 May 04 j 11:13	4° $\overline{0}$ 45'26		direct	-2167 May 22 j 10:07	22° $\overline{0}$ 13'13	
max. Earth dist.	-2175 Aug 18 j 03:56	7° $\overline{0}$ 14'34	31.26852 AU				
				conjunction	-2167 Sep 05 j 16:36	24° $\overline{0}$ 44'12	1°46'04
conjunction	-2175 Aug 19 j 04:36	7° $\overline{0}$ 16'52	1°21'47	minimum elong	-2167 Sep 05 j 16:36	24° $\overline{0}$ 44'12	1°46'06
minimum elong	-2175 Aug 19 j 04:35	7° $\overline{0}$ 16'52	1°21'49	max. Earth dist.	-2167 Sep 04 j 16:37	24° $\overline{0}$ 41'57	31.30114 AU
retrograde	-2175 Nov 29 j 03:45	9° $\overline{0}$ 43'12		retrograde	-2167 Dec 16 j 13:41	27° $\overline{0}$ 10'30	
opposition	-2174 Feb 14 j 16:36	8° $\overline{0}$ 21'27	1°29'12	opposition	-2166 Mar 04 j 12:03	25° $\overline{0}$ 48'47	1°54'35
min. Earth dist.	-2174 Feb 15 j 15:34	8° $\overline{0}$ 19'52	29.27334 AU	min. Earth dist.	-2166 Mar 05 j 10:26	25° $\overline{0}$ 47'15	29.30243 AU
direct	-2174 May 06 j 20:41	6° $\overline{0}$ 56'19		direct	-2166 May 24 j 23:04	24° $\overline{0}$ 23'53	
				max. Earth dist.	-2166 Sep 07 j 02:49	26° $\overline{0}$ 52'33	31.30122 AU
conjunction	-2174 Aug 21 j 15:22	9° $\overline{0}$ 27'43	1°25'17				
minimum elong	-2174 Aug 21 j 15:22	9° $\overline{0}$ 27'43	1°25'20	conjunction	-2166 Sep 08 j 02:36	26° $\overline{0}$ 54'47	1°48'28
max. Earth dist.	-2174 Aug 20 j 15:28	9° $\overline{0}$ 25'29	31.27628 AU	minimum elong	-2166 Sep 08 j 02:36	26° $\overline{0}$ 54'47	1°48'30
retrograde	-2174 Dec 01 j 13:09	11° $\overline{0}$ 54'03		retrograde	-2166 Dec 18 j 23:36	29° $\overline{0}$ 21'06	
opposition	-2173 Feb 17 j 03:51	10° $\overline{0}$ 32'21	1°32'53	opposition	-2165 Mar 06 j 23:44	27° $\overline{0}$ 59'20	1°57'03
min. Earth dist.	-2173 Feb 18 j 02:28	10° $\overline{0}$ 30'47	29.28091 AU	min. Earth dist.	-2165 Mar 07 j 22:11	27° $\overline{0}$ 57'48	29.30291 AU
direct	-2173 May 09 j 09:33	9° $\overline{0}$ 07'16		direct	-2165 May 27 j 09:02	26° $\overline{0}$ 34'27	
max. Earth dist.	-2173 Aug 23 j 01:05	11° $\overline{0}$ 36'19	31.28349 AU				
				conjunction	-2165 Sep 10 j 12:27	29° $\overline{0}$ 05'15	1°50'42
conjunction	-2173 Aug 24 j 01:52	11° $\overline{0}$ 38'38	1°28'39	minimum elong	-2165 Sep 10 j 12:27	29° $\overline{0}$ 05'15	1°50'43
minimum elong	-2173 Aug 24 j 01:52	11° $\overline{0}$ 38'38	1°28'41	max. Earth dist.	-2165 Sep 09 j 14:01	29° $\overline{0}$ 03'09	31.30198 AU
retrograde	-2173 Dec 04 j 00:46	14° $\overline{0}$ 04'59			-2165 Oct 05 j 10:29	0° $\overline{0}$ \overline{R}	
opposition	-2172 Feb 19 j 15:08	12° $\overline{0}$ 43'18	1°36'25	retrograde	-2165 Dec 21 j 08:08	1° $\overline{0}$ \overline{R} 31'35	
min. Earth dist.	-2172 Feb 20 j 13:47	12° $\overline{0}$ 41'45	29.28783 AU	opposition	-2164 Mar 08 j 11:22	0° $\overline{0}$ \overline{R} 09'48	1°59'21
direct	-2172 May 10 j 19:52	11° $\overline{0}$ 18'17		min. Earth dist.	-2164 Mar 09 j 08:52	0° $\overline{0}$ \overline{R} 08'20	29.30401 AU
					-2164 Mar 14 j 11:20	30° \overline{R} $\overline{0}$	
conjunction	-2172 Aug 25 j 12:37	13° $\overline{0}$ 49'37	1°31'54	direct	-2164 May 28 j 21:53	28° $\overline{0}$ 44'57	
minimum elong	-2172 Aug 25 j 12:37	13° $\overline{0}$ 49'37	1°31'57		-2164 Aug 07 j 15:19	0° $\overline{0}$ \overline{R}	
max. Earth dist.	-2172 Aug 24 j 12:47	13° $\overline{0}$ 47'24	31.28974 AU				
	-2172 Sep 27 j 04:26	15° $\overline{0}$		conjunction	-2164 Sep 11 j 22:13	1° $\overline{0}$ \overline{R} 15'41	1°52'46
retrograde	-2172 Dec 05 j 10:09	16° $\overline{0}$ 15'58		minimum elong	-2164 Sep 11 j 22:13	1° $\overline{0}$ \overline{R} 15'41	1°52'48
	-2171 Feb 17 j 15:27	15° \overline{R} $\overline{0}$		max. Earth dist.	-2164 Sep 10 j 23:26	1° $\overline{0}$ \overline{R} 13'32	31.30353 AU

Attention, astronomical year style is used: The year -2164 in astronomical counting style is the year 2165 BCE in historical counting style.

retrograde	-2164 Dec 22 j 19:13	3° $\mathring{\mu}$ 42'03		direct	-2155 Jun 18 j 08:09	18° $\mathring{\mu}$ 21'26	
opposition	-2163 Mar 10 j 22:53	2° $\mathring{\mu}$ 20'16	2°01'29				
min. Earth dist.	-2163 Mar 11 j 19:41	2° $\mathring{\mu}$ 18'51	29.30612 AU	conjunction	-2155 Oct 01 j 12:59	20° $\mathring{\mu}$ 51'26	2°03'54
direct	-2163 May 31 j 07:13	0° $\mathring{\mu}$ 55'28		minimum elong	-2155 Oct 01 j 12:59	20° $\mathring{\mu}$ 51'26	2°03'54
max. Earth dist.	-2163 Sep 13 j 11:02	3° $\mathring{\mu}$ 24'09	31.30599 AU	max. Earth dist.	-2155 Sep 30 j 18:31	20° $\mathring{\mu}$ 49'41	31.30797 AU
				retrograde	-2154 Jan 11 j 17:13	23° $\mathring{\mu}$ 18'21	
conjunction	-2163 Sep 14 j 08:05	3° $\mathring{\mu}$ 26'08	1°54'41	opposition	-2154 Mar 31 j 11:35	21° $\mathring{\mu}$ 56'19	2°12'34
minimum elong	-2163 Sep 14 j 08:05	3° $\mathring{\mu}$ 26'08	1°54'41	min. Earth dist.	-2154 Apr 01 j 04:29	21° $\mathring{\mu}$ 55'10	29.30759 AU
retrograde	-2163 Dec 25 j 04:32	5° $\mathring{\mu}$ 52'34		direct	-2154 Jun 20 j 18:09	20° $\mathring{\mu}$ 31'55	
opposition	-2162 Mar 13 j 10:46	4° $\mathring{\mu}$ 30'47	2°03'26				
min. Earth dist.	-2162 Mar 14 j 07:28	4° $\mathring{\mu}$ 29'22	29.30883 AU	conjunction	-2154 Oct 03 j 22:16	23° $\mathring{\mu}$ 01'47	2°04'16
direct	-2162 Jun 02 j 18:26	3° $\mathring{\mu}$ 06'03		minimum elong	-2154 Oct 03 j 22:16	23° $\mathring{\mu}$ 01'47	2°04'17
				max. Earth dist.	-2154 Oct 03 j 05:42	23° $\mathring{\mu}$ 00'13	31.30408 AU
conjunction	-2162 Sep 16 j 17:37	5° $\mathring{\mu}$ 36'39	1°56'26	retrograde	-2153 Jan 14 j 02:18	25° $\mathring{\mu}$ 28'46	
minimum elong	-2162 Sep 16 j 17:37	5° $\mathring{\mu}$ 36'39	1°56'28	opposition	-2153 Apr 02 j 23:57	24° $\mathring{\mu}$ 06'39	2°12'52
max. Earth dist.	-2162 Sep 15 j 20:14	5° $\mathring{\mu}$ 34'38	31.30896 AU	min. Earth dist.	-2153 Apr 03 j 16:34	24° $\mathring{\mu}$ 05'32	29.30374 AU
retrograde	-2162 Dec 27 j 16:54	8° $\mathring{\mu}$ 03'09		direct	-2153 Jun 23 j 05:59	22° $\mathring{\mu}$ 42'17	
opposition	-2161 Mar 15 j 22:35	6° $\mathring{\mu}$ 41'23	2°05'13				
min. Earth dist.	-2161 Mar 16 j 18:01	6° $\mathring{\mu}$ 40'04	29.31190 AU	conjunction	-2153 Oct 06 j 07:26	25° $\mathring{\mu}$ 12'01	2°04'28
direct	-2161 Jun 05 j 05:59	5° $\mathring{\mu}$ 16'44		minimum elong	-2153 Oct 06 j 07:26	25° $\mathring{\mu}$ 12'01	2°04'27
max. Earth dist.	-2161 Sep 18 j 07:28	7° $\mathring{\mu}$ 45'24	31.31184 AU	max. Earth dist.	-2153 Oct 05 j 14:50	25° $\mathring{\mu}$ 10'27	31.30054 AU
				retrograde	-2152 Jan 16 j 14:11	27° $\mathring{\mu}$ 39'04	
conjunction	-2161 Sep 19 j 03:24	7° $\mathring{\mu}$ 47'17	1°58'01	opposition	-2152 Apr 04 j 12:02	26° $\mathring{\mu}$ 16'54	2°12'59
minimum elong	-2161 Sep 19 j 03:24	7° $\mathring{\mu}$ 47'17	1°58'01	min. Earth dist.	-2152 Apr 05 j 02:59	26° $\mathring{\mu}$ 15'54	29.30060 AU
retrograde	-2161 Dec 30 j 03:43	10° $\mathring{\mu}$ 13'51		direct	-2152 Jun 24 j 17:00	24° $\mathring{\mu}$ 52'33	
opposition	-2160 Mar 17 j 10:30	8° $\mathring{\mu}$ 52'05	2°06'49				
min. Earth dist.	-2160 Mar 18 j 06:30	8° $\mathring{\mu}$ 50'43	29.31461 AU	conjunction	-2152 Oct 07 j 16:43	27° $\mathring{\mu}$ 22'13	2°04'29
direct	-2160 Jun 06 j 18:22	7° $\mathring{\mu}$ 27'30		minimum elong	-2152 Oct 07 j 16:43	27° $\mathring{\mu}$ 22'13	2°04'30
				max. Earth dist.	-2152 Oct 07 j 01:53	27° $\mathring{\mu}$ 20'49	31.29777 AU
conjunction	-2160 Sep 20 j 13:04	9° $\mathring{\mu}$ 57'59	1°59'25	retrograde	-2151 Jan 18 j 00:56	29° $\mathring{\mu}$ 49'22	
minimum elong	-2160 Sep 20 j 13:04	9° $\mathring{\mu}$ 57'59	1°59'27	opposition	-2151 Apr 07 j 00:28	28° $\mathring{\mu}$ 27'09	2°12'55
max. Earth dist.	-2160 Sep 19 j 16:52	9° $\mathring{\mu}$ 56'06	31.31423 AU	min. Earth dist.	-2151 Apr 07 j 15:20	28° $\mathring{\mu}$ 26'08	29.29833 AU
retrograde	-2160 Dec 31 j 15:21	12° $\mathring{\mu}$ 24'38		direct	-2151 Jun 27 j 04:35	27° $\mathring{\mu}$ 02'51	
opposition	-2159 Mar 19 j 22:28	11° $\mathring{\mu}$ 02'51	2°08'14	max. Earth dist.	-2151 Oct 09 j 11:26	29° $\mathring{\mu}$ 31'05	31.29610 AU
min. Earth dist.	-2159 Mar 20 j 17:05	11° $\mathring{\mu}$ 01'36	29.31651 AU				
direct	-2159 Jun 09 j 06:37	9° $\mathring{\mu}$ 38'20		conjunction	-2151 Oct 10 j 01:45	29° $\mathring{\mu}$ 32'26	2°04'20
				minimum elong	-2151 Oct 10 j 01:45	29° $\mathring{\mu}$ 32'26	2°04'19
conjunction	-2159 Sep 22 j 22:45	12° $\mathring{\mu}$ 08'45	2°00'40		-2151 Oct 22 j 07:42	0° $\mathring{\mu}$	
minimum elong	-2159 Sep 22 j 22:45	12° $\mathring{\mu}$ 08'45	2°00'40	retrograde	-2150 Jan 20 j 12:41	1° $\mathring{\mu}$ 59'42	
max. Earth dist.	-2159 Sep 22 j 03:10	12° $\mathring{\mu}$ 06'55	31.31547 AU	opposition	-2150 Apr 09 j 12:50	0° $\mathring{\mu}$ 37'28	2°12'39
retrograde	-2158 Jan 03 j 01:08	14° $\mathring{\mu}$ 35'28		min. Earth dist.	-2150 Apr 10 j 01:34	0° $\mathring{\mu}$ 36'37	29.29705 AU
opposition	-2158 Mar 22 j 10:44	13° $\mathring{\mu}$ 13'41	2°09'28		-2150 May 03 j 10:50	30° $\mathring{\mu}$	
min. Earth dist.	-2158 Mar 23 j 06:02	13° $\mathring{\mu}$ 12'22	29.31723 AU	direct	-2150 Jun 29 j 16:08	29° $\mathring{\mu}$ 13'15	
direct	-2158 Jun 11 j 18:39	11° $\mathring{\mu}$ 49'13			-2150 Aug 23 j 06:05	0° $\mathring{\mu}$	
conjunction	-2158 Sep 25 j 08:27	14° $\mathring{\mu}$ 19'32	2°01'44	conjunction	-2150 Oct 12 j 10:55	1° $\mathring{\mu}$ 42'47	2°03'59
minimum elong	-2158 Sep 25 j 08:27	14° $\mathring{\mu}$ 19'32	2°01'45	minimum elong	-2150 Oct 12 j 10:55	1° $\mathring{\mu}$ 42'47	2°04'00
max. Earth dist.	-2158 Sep 24 j 13:20	14° $\mathring{\mu}$ 17'45	31.31556 AU	max. Earth dist.	-2150 Oct 11 j 21:41	1° $\mathring{\mu}$ 41'32	31.29518 AU
retrograde	-2157 Jan 05 j 11:37	16° $\mathring{\mu}$ 46'18		retrograde	-2149 Jan 22 j 23:20	4° $\mathring{\mu}$ 10'11	
opposition	-2157 Mar 24 j 22:53	15° $\mathring{\mu}$ 24'29	2°10'31	opposition	-2149 Apr 12 j 01:20	2° $\mathring{\mu}$ 47'57	2°12'12
min. Earth dist.	-2157 Mar 25 j 17:03	15° $\mathring{\mu}$ 23'15	29.31657 AU	min. Earth dist.	-2149 Apr 12 j 14:11	2° $\mathring{\mu}$ 47'04	29.29646 AU
direct	-2157 Jun 14 j 08:15	14° $\mathring{\mu}$ 00'03		direct	-2149 Jul 02 j 03:38	1° $\mathring{\mu}$ 23'50	
conjunction	-2157 Sep 27 j 17:59	16° $\mathring{\mu}$ 30'17	2°02'38	conjunction	-2149 Oct 14 j 20:00	3° $\mathring{\mu}$ 53'18	2°03'28
minimum elong	-2157 Sep 27 j 17:59	16° $\mathring{\mu}$ 30'17	2°02'38	minimum elong	-2149 Oct 14 j 20:00	3° $\mathring{\mu}$ 53'18	2°03'28
max. Earth dist.	-2157 Sep 26 j 22:46	16° $\mathring{\mu}$ 28'28	31.31417 AU	max. Earth dist.	-2149 Oct 14 j 07:56	3° $\mathring{\mu}$ 52'10	31.29480 AU
retrograde	-2156 Jan 07 j 21:57	18° $\mathring{\mu}$ 57'06		retrograde	-2148 Jan 25 j 10:34	6° $\mathring{\mu}$ 20'50	
opposition	-2156 Mar 26 j 11:08	17° $\mathring{\mu}$ 35'13	2°11'23	opposition	-2148 Apr 13 j 13:46	4° $\mathring{\mu}$ 58'36	2°11'33
min. Earth dist.	-2156 Mar 27 j 05:31	17° $\mathring{\mu}$ 33'58	29.31460 AU	min. Earth dist.	-2148 Apr 14 j 01:02	4° $\mathring{\mu}$ 57'50	29.29592 AU
direct	-2156 Jun 15 j 19:07	16° $\mathring{\mu}$ 10'48		direct	-2148 Jul 03 j 16:53	3° $\mathring{\mu}$ 34'35	
max. Earth dist.	-2156 Sep 28 j 09:34	18° $\mathring{\mu}$ 39'13	31.31155 AU				
conjunction	-2156 Sep 29 j 03:36	18° $\mathring{\mu}$ 40'55	2°03'21	conjunction	-2148 Oct 16 j 05:06	6° $\mathring{\mu}$ 04'01	2°02'46
minimum elong	-2156 Sep 29 j 03:36	18° $\mathring{\mu}$ 40'55	2°03'22	minimum elong	-2148 Oct 16 j 05:06	6° $\mathring{\mu}$ 04'01	2°02'46
retrograde	-2155 Jan 09 j 06:19	21° $\mathring{\mu}$ 07'47		max. Earth dist.	-2148 Oct 15 j 17:13	6° $\mathring{\mu}$ 02'53	31.29411 AU
opposition	-2155 Mar 28 j 23:17	19° $\mathring{\mu}$ 45'50	2°12'04	retrograde	-2147 Jan 26 j 21:47	8° $\mathring{\mu}$ 31'42	
min. Earth dist.	-2155 Mar 29 j 16:58	19° $\mathring{\mu}$ 44'38	29.31134 AU	opposition	-2147 Apr 16 j 02:23	7° $\mathring{\mu}$ 09'27	2°10'42
				min. Earth dist.	-2147 Apr 16 j 13:34	7° $\mathring{\mu}$ 08'42	29.29504 AU

Attention, astronomical year style is used: The year -2147 in astronomical counting style is the year 2148 BCE in historical counting style.

direct	-2147 Jul 06 j 03:22	5° 4 5'32		minimum elong	-2139 Nov 04 j 15:26	25° 4 2'40	1°48'46
				max. Earth dist.	-2139 Nov 04 j 10:43	25° 4 2'13	31.24723 AU
conjunction	-2147 Oct 18 j 14:23	8° 4 14'54	2°01'54	retrograde	-2138 Feb 16 j 01:34	28° 4 11'26	
minimum elong	-2147 Oct 18 j 14:23	8° 4 14'54	2°01'53	opposition	-2138 May 06 j 22:05	26° 4 48'34	1°54'59
max. Earth dist.	-2147 Oct 18 j 04:04	8° 4 13'55	31.29287 AU	min. Earth dist.	-2138 May 07 j 01:46	26° 4 48'19	29.24562 AU
retrograde	-2146 Jan 29 j 06:53	10° 4 24'44		direct	-2138 Jul 26 j 11:20	25° 4 24'58	
opposition	-2146 Apr 18 j 15:10	9° 4 20'28	2°09'41				
min. Earth dist.	-2146 Apr 19 j 01:23	9° 4 19'47	29.29322 AU	conjunction	-2138 Nov 07 j 00:29	27° 4 53'26	1°46'26
direct	-2146 Jul 08 j 16:04	7° 4 56'38		minimum elong	-2138 Nov 07 j 00:29	27° 4 53'26	1°46'25
				max. Earth dist.	-2138 Nov 06 j 21:51	27° 4 53'12	31.24199 AU
conjunction	-2146 Oct 20 j 23:27	10° 4 25'56	2°00'51		-2137 Jan 12 j 14:53	0° 4 22'21	
minimum elong	-2146 Oct 20 j 23:27	10° 4 25'56	2°00'50	retrograde	-2137 Feb 18 j 11:14	0° 4 22'21	
max. Earth dist.	-2146 Oct 20 j 12:43	10° 4 24'55	31.29053 AU		-2137 Mar 28 j 13:16	30° 4 19'05	
retrograde	-2145 Jan 31 j 18:27	12° 4 53'54		opposition	-2137 May 09 j 11:00	28° 4 59'26	1°52'22
opposition	-2145 Apr 21 j 03:59	11° 4 31'37	2°08'28	min. Earth dist.	-2137 May 09 j 13:18	28° 4 59'17	29.24057 AU
min. Earth dist.	-2145 Apr 21 j 13:28	11° 4 30'58	29.29027 AU	direct	-2137 Jul 29 j 00:20	27° 4 35'54	
direct	-2145 Jul 11 j 01:58	10° 4 07'50			-2137 Nov 07 j 11:54	0° 4 22'21	
conjunction	-2145 Oct 23 j 08:51	12° 4 37'03	1°59'37	conjunction	-2137 Nov 09 j 09:30	0° 4 04'19	1°43'54
minimum elong	-2145 Oct 23 j 08:51	12° 4 37'03	1°59'36	minimum elong	-2137 Nov 09 j 09:30	0° 4 04'19	1°43'52
max. Earth dist.	-2145 Oct 22 j 23:40	12° 4 36'11	31.28683 AU	max. Earth dist.	-2137 Nov 09 j 06:49	0° 4 04'04	31.23730 AU
retrograde	-2144 Feb 03 j 04:14	15° 4 05'09		retrograde	-2136 Feb 20 j 23:16	2° 4 33'23	
opposition	-2144 Apr 22 j 16:44	13° 4 42'49	2°07'04	opposition	-2136 May 10 j 23:49	1° 4 10'26	1°49'35
min. Earth dist.	-2144 Apr 23 j 02:12	13° 4 42'10	29.28574 AU	min. Earth dist.	-2136 May 11 j 01:01	1° 4 10'22	29.23601 AU
direct	-2144 Jul 12 j 13:51	12° 4 19'05		direct	-2136 Jul 01 j 15:49	30° 4 19'05	
conjunction	-2144 Oct 24 j 18:05	14° 4 48'12	1°58'14		-2136 Jul 30 j 10:41	29° 4 46'59	
minimum elong	-2144 Oct 24 j 18:05	14° 4 48'12	1°58'14		-2136 Aug 27 j 12:12	0° 4 22'21	
max. Earth dist.	-2144 Oct 24 j 08:34	14° 4 47'18	31.28168 AU	conjunction	-2136 Nov 10 j 18:44	2° 4 15'21	1°41'13
retrograde	-2143 Feb 04 j 16:22	17° 4 16'25		minimum elong	-2136 Nov 10 j 18:44	2° 4 15'21	1°41'12
opposition	-2143 Apr 25 j 05:35	15° 4 54'00	2°05'30	max. Earth dist.	-2136 Nov 10 j 18:01	2° 4 15'17	31.23277 AU
min. Earth dist.	-2143 Apr 25 j 13:41	15° 4 53'27	29.27986 AU	retrograde	-2135 Feb 22 j 09:32	4° 4 44'36	
direct	-2143 Jul 15 j 00:46	14° 4 30'17		opposition	-2135 May 13 j 12:57	3° 4 21'37	1°46'39
conjunction	-2143 Oct 27 j 03:16	16° 4 59'18	1°56'40	min. Earth dist.	-2135 May 13 j 13:45	3° 4 21'34	29.23130 AU
minimum elong	-2143 Oct 27 j 03:16	16° 4 59'18	1°56'39	direct	-2135 Aug 01 j 22:32	1° 4 58'15	
max. Earth dist.	-2143 Oct 26 j 19:10	16° 4 58'32	31.27517 AU	conjunction	-2135 Nov 13 j 03:47	4° 4 26'33	1°38'23
retrograde	-2142 Feb 07 j 03:16	19° 4 27'37		minimum elong	-2135 Nov 13 j 03:47	4° 4 26'33	1°38'21
opposition	-2142 Apr 27 j 18:38	18° 4 05'06	2°03'44	max. Earth dist.	-2135 Nov 13 j 03:11	4° 4 26'29	31.22800 AU
min. Earth dist.	-2142 Apr 28 j 02:55	18° 4 04'33	29.27283 AU	retrograde	-2134 Feb 24 j 21:56	6° 4 55'59	
direct	-2142 Jul 17 j 11:53	16° 4 41'25		opposition	-2134 May 16 j 02:04	5° 4 32'58	1°43'32
conjunction	-2142 Oct 29 j 12:23	19° 4 10'17	1°54'57	min. Earth dist.	-2134 May 16 j 01:18	5° 4 33'01	29.22618 AU
minimum elong	-2142 Oct 29 j 12:23	19° 4 10'17	1°54'57	direct	-2134 Aug 04 j 08:49	4° 4 09'40	
max. Earth dist.	-2142 Oct 29 j 04:46	19° 4 09'34	31.26794 AU	conjunction	-2134 Nov 15 j 13:09	6° 4 37'56	1°35'25
retrograde	-2141 Feb 09 j 15:03	21° 4 38'43		minimum elong	-2134 Nov 15 j 13:09	6° 4 37'56	1°35'24
opposition	-2141 Apr 30 j 07:21	20° 4 16'06	2°01'49	max. Earth dist.	-2134 Nov 15 j 13:52	6° 4 38'00	31.22239 AU
min. Earth dist.	-2141 Apr 30 j 13:41	20° 4 15'40	29.26537 AU	retrograde	-2133 Feb 27 j 09:18	9° 4 07'32	
direct	-2141 Jul 19 j 23:16	18° 4 52'24		opposition	-2133 May 18 j 15:13	7° 4 44'29	1°40'17
conjunction	-2141 Oct 31 j 21:25	21° 4 21'09	1°53'04	min. Earth dist.	-2133 May 18 j 14:45	7° 4 44'31	29.22004 AU
minimum elong	-2141 Oct 31 j 21:25	21° 4 21'09	1°53'02	direct	-2133 Aug 06 j 19:04	6° 4 21'15	
max. Earth dist.	-2141 Oct 31 j 14:43	21° 4 20'32	31.26044 AU	conjunction	-2133 Nov 17 j 22:32	8° 4 49'27	1°32'18
retrograde	-2140 Feb 12 j 02:26	23° 4 49'41		minimum elong	-2133 Nov 17 j 22:33	8° 4 49'28	1°32'15
opposition	-2140 May 01 j 20:17	22° 4 26'58	1°59'43	max. Earth dist.	-2133 Nov 17 j 23:37	8° 4 49'34	31.21572 AU
min. Earth dist.	-2140 May 02 j 02:35	22° 4 26'32	29.25804 AU	retrograde	-2132 Feb 29 j 22:01	11° 4 19'14	
direct	-2140 Jul 21 j 11:27	21° 4 03'17		opposition	-2132 May 20 j 04:18	9° 4 56'08	1°36'53
conjunction	-2140 Nov 02 j 06:26	23° 4 31'56	1°51'01	min. Earth dist.	-2132 May 20 j 02:06	9° 4 56'17	29.21256 AU
minimum elong	-2140 Nov 02 j 06:26	23° 4 31'56	1°50'59	direct	-2132 Aug 08 j 06:08	8° 4 32'56	
max. Earth dist.	-2140 Nov 02 j 01:17	23° 4 31'27	31.25345 AU	conjunction	-2132 Nov 19 j 07:52	11° 4 01'06	1°29'03
retrograde	-2139 Feb 13 j 14:10	26° 4 00'34		minimum elong	-2132 Nov 19 j 07:53	11° 4 01'06	1°29'01
opposition	-2139 May 04 j 09:05	24° 4 37'45	1°57'26	max. Earth dist.	-2132 Nov 19 j 09:20	11° 4 01'14	31.20748 AU
min. Earth dist.	-2139 May 04 j 13:23	24° 4 37'28	29.25132 AU	retrograde	-2131 Mar 03 j 10:29	13° 4 31'03	
direct	-2139 Jul 24 j 00:48	23° 4 14'06		opposition	-2131 May 22 j 17:38	12° 4 07'52	1°33'20
conjunction	-2139 Nov 04 j 15:25	25° 4 42'40	1°48'48	min. Earth dist.	-2131 May 22 j 15:46	12° 4 07'59	29.20359 AU
				direct	-2131 Aug 10 j 17:49	10° 4 44'42	

Attention, astronomical year style is used: The year -2131 in astronomical counting style is the year 2132 BCE in historical counting style.

conjunction	-2131 Nov 21 j 17:22	13° 16 12'47	1°25'40	direct	-2123 Aug 28 j 13:39	28° 16 18'30	
minimum elong	-2131 Nov 21 j 17:23	13° 16 12'47	1°25'38		-2123 Nov 18 j 06:38	0° 27	
max. Earth dist.	-2131 Nov 21 j 20:04	13° 16 13'03	31.19796 AU				
	-2130 Jan 13 j 04:43	15° 16		conjunction	-2123 Dec 08 j 20:41	0° 27 46'07	0°54'38
retrograde	-2130 Mar 05 j 23:21	15° 16 42'52		minimum elong	-2123 Dec 08 j 20:41	0° 27 46'08	0°54'35
	-2130 Apr 29 j 05:49	15° 16 42'52		max. Earth dist.	-2123 Dec 09 j 06:51	0° 27 47'05	31.12310 AU
opposition	-2130 May 25 j 06:48	14° 16 19'36	1°29'40	retrograde	-2122 Mar 23 j 20:59	3° 27 17'27	
min. Earth dist.	-2130 May 25 j 03:23	14° 16 19'50	29.19333 AU	opposition	-2122 Jun 12 j 15:42	1° 27 53'35	0°56'04
direct	-2130 Aug 13 j 06:54	12° 16 56'27		min. Earth dist.	-2122 Jun 12 j 05:04	1° 27 54'19	29.11990 AU
	-2130 Nov 13 j 07:48	15° 16		direct	-2122 Aug 31 j 00:06	0° 27 30'39	
conjunction	-2130 Nov 24 j 02:40	15° 16 24'27	1°22'10	conjunction	-2122 Dec 11 j 06:28	2° 27 58'15	0°50'19
minimum elong	-2130 Nov 24 j 02:40	15° 16 24'28	1°22'09	minimum elong	-2122 Dec 11 j 06:29	2° 27 58'15	0°50'17
max. Earth dist.	-2130 Nov 24 j 05:20	15° 16 24'43	31.18728 AU	max. Earth dist.	-2122 Dec 11 j 18:07	2° 27 59'21	31.11597 AU
retrograde	-2129 Mar 08 j 11:18	17° 16 54'41		retrograde	-2121 Mar 26 j 10:16	5° 27 29'45	
opposition	-2129 May 27 j 20:01	16° 16 31'18	1°25'52	opposition	-2121 Jun 15 j 04:47	4° 27 05'51	0°51'24
min. Earth dist.	-2129 May 27 j 16:27	16° 16 31'32	29.18232 AU	min. Earth dist.	-2121 Jun 14 j 16:38	4° 27 06'40	29.11241 AU
direct	-2129 Aug 15 j 17:36	15° 16 08'08		direct	-2121 Sep 02 j 11:50	2° 27 42'56	
conjunction	-2129 Nov 26 j 12:07	17° 16 36'04	1°18'34	conjunction	-2121 Dec 13 j 16:18	5° 27 10'32	0°45'56
minimum elong	-2129 Nov 26 j 12:07	17° 16 36'04	1°18'30	minimum elong	-2121 Dec 13 j 16:18	5° 27 10'32	0°45'52
max. Earth dist.	-2129 Nov 26 j 16:41	17° 16 36'30	31.17610 AU	max. Earth dist.	-2121 Dec 14 j 03:41	5° 27 11'37	31.10811 AU
retrograde	-2128 Mar 09 j 21:34	20° 16 06'24		retrograde	-2120 Mar 27 j 23:21	7° 27 42'12	
opposition	-2128 May 29 j 09:00	18° 16 42'56	1°21'57	opposition	-2120 Jun 16 j 17:58	6° 27 18'15	0°46'40
min. Earth dist.	-2128 May 29 j 04:10	18° 16 43'15	29.17104 AU	min. Earth dist.	-2120 Jun 16 j 05:55	6° 27 19'04	29.10416 AU
direct	-2128 Aug 17 j 07:14	17° 16 19'46		direct	-2120 Sep 03 j 22:03	4° 27 55'22	
conjunction	-2128 Nov 27 j 21:24	19° 16 47'37	1°14'50	conjunction	-2120 Dec 15 j 02:25	7° 27 22'56	0°41'28
minimum elong	-2128 Nov 27 j 21:24	19° 16 47'37	1°14'48	minimum elong	-2120 Dec 15 j 02:25	7° 27 22'56	0°41'26
max. Earth dist.	-2128 Nov 28 j 01:57	19° 16 48'03	31.16514 AU	max. Earth dist.	-2120 Dec 15 j 15:22	7° 27 24'10	31.09933 AU
retrograde	-2127 Mar 12 j 10:17	22° 16 18'06		retrograde	-2119 Mar 30 j 11:40	9° 27 54'45	
opposition	-2127 May 31 j 22:10	20° 16 54'31	1°17'54	opposition	-2119 Jun 19 j 07:12	8° 27 30'43	0°41'52
min. Earth dist.	-2127 May 31 j 16:04	20° 16 54'56	29.16045 AU	min. Earth dist.	-2119 Jun 18 j 18:14	8° 27 31'36	29.09472 AU
direct	-2127 Aug 19 j 18:28	19° 16 31'22		direct	-2119 Sep 06 j 11:36	7° 27 07'51	
conjunction	-2127 Nov 30 j 06:45	21° 16 59'09	1°11'00	conjunction	-2119 Dec 17 j 12:21	9° 27 35'24	0°36'57
minimum elong	-2127 Nov 30 j 06:45	21° 16 59'09	1°10'57	minimum elong	-2119 Dec 17 j 12:22	9° 27 35'24	0°36'54
max. Earth dist.	-2127 Nov 30 j 13:27	21° 16 59'47	31.15494 AU	max. Earth dist.	-2119 Dec 18 j 00:47	9° 27 36'34	31.08940 AU
retrograde	-2126 Mar 14 j 20:26	24° 16 29'47		retrograde	-2118 Apr 02 j 01:47	12° 27 07'20	
opposition	-2126 Jun 03 j 11:20	23° 16 06'07	1°13'45	opposition	-2118 Jun 21 j 20:28	10° 27 43'14	0°37'00
min. Earth dist.	-2126 Jun 03 j 04:30	23° 16 06'35	29.15069 AU	min. Earth dist.	-2118 Jun 21 j 06:53	10° 27 44'09	29.08422 AU
direct	-2126 Aug 22 j 06:38	21° 16 43'00		direct	-2118 Sep 08 j 23:08	9° 27 20'21	
conjunction	-2126 Dec 02 j 16:09	24° 16 10'43	1°07'03	conjunction	-2118 Dec 19 j 22:37	11° 27 47'51	0°32'22
minimum elong	-2126 Dec 02 j 16:10	24° 16 10'43	1°07'02	minimum elong	-2118 Dec 19 j 22:37	11° 27 47'51	0°32'20
max. Earth dist.	-2126 Dec 02 j 23:16	24° 16 11'23	31.14585 AU	max. Earth dist.	-2118 Dec 20 j 12:30	11° 27 49'09	31.07835 AU
retrograde	-2125 Mar 17 j 08:08	26° 16 41'30		retrograde	-2117 Apr 04 j 12:19	14° 27 19'54	
opposition	-2125 Jun 06 j 00:14	25° 16 17'47	1°09'29	opposition	-2117 Jun 24 j 09:28	12° 27 55'42	0°32'05
min. Earth dist.	-2125 Jun 05 j 15:36	25° 16 18'22	29.14208 AU	min. Earth dist.	-2117 Jun 23 j 19:45	12° 27 56'38	29.07272 AU
direct	-2125 Aug 24 j 16:56	23° 16 54'41		direct	-2117 Sep 11 j 11:29	11° 27 32'48	
conjunction	-2125 Dec 05 j 01:39	26° 16 22'22	1°03'01	conjunction	-2117 Dec 22 j 08:41	14° 27 00'14	0°27'45
minimum elong	-2125 Dec 05 j 01:40	26° 16 22'22	1°02'58	minimum elong	-2117 Dec 22 j 08:41	14° 27 00'14	0°27'42
max. Earth dist.	-2125 Dec 05 j 10:16	26° 16 23'11	31.13763 AU	max. Earth dist.	-2117 Dec 22 j 22:38	14° 27 01'34	31.06675 AU
retrograde	-2124 Mar 18 j 19:11	28° 16 53'20		retrograde	-2116 Apr 06 j 00:39	16° 27 32'25	
opposition	-2124 Jun 07 j 13:23	27° 16 29'34	1°05'06	opposition	-2116 Jun 25 j 22:29	15° 27 08'07	0°27'07
min. Earth dist.	-2124 Jun 07 j 04:39	27° 16 30'09	29.13424 AU	min. Earth dist.	-2116 Jun 25 j 07:24	15° 27 09'08	29.06104 AU
direct	-2124 Aug 26 j 02:52	26° 16 06'31		direct	-2116 Sep 12 j 22:46	13° 27 45'11	
conjunction	-2124 Dec 06 j 11:04	28° 16 34'10	0°58'52	conjunction	-2116 Dec 23 j 18:43	16° 27 12'35	0°23'05
minimum elong	-2124 Dec 06 j 11:05	28° 16 34'10	0°58'50	minimum elong	-2116 Dec 23 j 18:43	16° 27 12'35	0°23'03
max. Earth dist.	-2124 Dec 06 j 20:39	28° 16 35'04	31.13024 AU	max. Earth dist.	-2116 Dec 24 j 09:55	16° 27 14'01	31.05509 AU
	-2123 Jan 15 j 12:47	0° 27		retrograde	-2115 Apr 08 j 11:47	18° 27 44'54	
retrograde	-2123 Mar 21 j 08:02	1° 27 05'18		opposition	-2115 Jun 28 j 11:37	17° 27 20'29	0°22'06
	-2123 May 29 j 15:00	30° 16 42'14		min. Earth dist.	-2115 Jun 27 j 20:35	17° 27 21'31	29.04969 AU
opposition	-2123 Jun 10 j 02:28	29° 16 41'30	1°00'38	direct	-2115 Sep 15 j 09:32	15° 27 57'33	
min. Earth dist.	-2123 Jun 09 j 15:39	29° 16 42'14	29.12698 AU				

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Attention, astronomical year style is used: The year -2115 in astronomical counting style is the year 2116 BCE in historical counting style.

conjunction	-2115 Dec 26 j 04:55	18° \mathring{A} 24'54	0°18'24	retrograde	-2108 Apr 24 j 08:18	4° \mathring{C} 15'12	
minimum elong	-2115 Dec 26 j 04:55	18° \mathring{A} 24'54	0°18'20	min. Earth dist.	-2108 Jul 13 j 09:52	2° \mathring{C} 51'56	28.99557 AU
max. Earth dist.	-2115 Dec 26 j 21:03	18° \mathring{A} 26'26	31.04424 AU	opposition	-2108 Jul 14 j 06:04	2° \mathring{C} 50'33	0°-13'-32
retrograde	-2114 Apr 11 j 00:26	20° \mathring{A} 57'21		direct	-2108 Sep 30 j 14:53	1° \mathring{C} 27'48	
min. Earth dist.	-2114 Jun 30 j 07:26	19° \mathring{A} 34'02	29.03934 AU				
opposition	-2114 Jul 01 j 00:27	19° \mathring{A} 32'52	0°17'04	conjunction	-2107 Jan 10 j 06:54	3° \mathring{C} 55'22	0°-15'-2
direct	-2114 Sep 17 j 20:35	18° \mathring{A} 09'55		minimum elong	-2107 Jan 10 j 06:53	3° \mathring{C} 55'22	0°15'05
				behind sun begin	-2107 Jan 10 j 04:31	3° \mathring{C} 55'09	
conjunction	-2114 Dec 28 j 15:07	20° \mathring{A} 37'16	0°13'41	behind sun end	-2107 Jan 10 j 09:16	3° \mathring{C} 55'35	
minimum elong	-2114 Dec 28 j 15:07	20° \mathring{A} 37'16	0°13'38	max. Earth dist.	-2107 Jan 11 j 03:39	3° \mathring{C} 57'20	30.99174 AU
behind sun begin	-2114 Dec 28 j 11:32	20° \mathring{A} 36'57		retrograde	-2107 Apr 26 j 22:21	6° \mathring{C} 28'55	
behind sun end	-2114 Dec 28 j 18:42	20° \mathring{A} 37'36		opposition	-2107 Jul 16 j 19:05	5° \mathring{C} 04'14	0°-18'-38
max. Earth dist.	-2114 Dec 29 j 07:45	20° \mathring{A} 38'50	31.03438 AU	min. Earth dist.	-2107 Jul 15 j 21:59	5° \mathring{C} 05'41	28.98808 AU
retrograde	-2113 Apr 13 j 12:56	23° \mathring{A} 09'52		direct	-2107 Oct 03 j 02:45	3° \mathring{C} 41'30	
opposition	-2113 Jul 03 j 13:28	21° \mathring{A} 45'19	0°12'00				
min. Earth dist.	-2113 Jul 02 j 20:33	21° \mathring{A} 46'29	29.03014 AU	conjunction	-2106 Jan 12 j 18:07	6° \mathring{C} 09'06	0°-19'-47
direct	-2113 Sep 20 j 06:34	20° \mathring{A} 22'24		minimum elong	-2106 Jan 12 j 18:07	6° \mathring{C} 09'06	0°19'51
				max. Earth dist.	-2106 Jan 13 j 15:24	6° \mathring{C} 11'06	30.98357 AU
conjunction	-2113 Dec 31 j 01:29	22° \mathring{A} 49'45	0°08'56	retrograde	-2106 Apr 29 j 10:59	8° \mathring{C} 42'46	
minimum elong	-2113 Dec 31 j 01:28	22° \mathring{A} 49'45	0°08'53	min. Earth dist.	-2106 Jul 18 j 11:44	7° \mathring{C} 19'26	28.97938 AU
behind sun begin	-2113 Dec 30 j 19:56	22° \mathring{A} 49'15		opposition	-2106 Jul 19 j 08:03	7° \mathring{C} 18'02	0°-23'-42
behind sun end	-2113 Dec 31 j 07:01	22° \mathring{A} 50'16		direct	-2106 Oct 05 j 14:04	5° \mathring{C} 55'18	
max. Earth dist.	-2113 Dec 31 j 19:46	22° \mathring{A} 51'29	31.02578 AU				
retrograde	-2112 Apr 15 j 01:58	25° \mathring{A} 22'30		conjunction	-2105 Jan 15 j 05:27	8° \mathring{C} 22'53	0°-24'-30
min. Earth dist.	-2112 Jul 04 j 07:35	23° \mathring{A} 59'12	29.02203 AU	minimum elong	-2105 Jan 15 j 05:27	8° \mathring{C} 22'53	0°24'33
opposition	-2112 Jul 05 j 02:16	23° \mathring{A} 57'56	0°06'54	max. Earth dist.	-2105 Jan 16 j 02:55	8° \mathring{C} 24'55	30.97437 AU
direct	-2112 Sep 21 j 17:36	22° \mathring{A} 35'01		retrograde	-2105 May 01 j 23:30	10° \mathring{C} 56'39	
				opposition	-2105 Jul 21 j 20:53	9° \mathring{C} 31'52	0°-28'-44
conjunction	-2111 Jan 01 j 11:49	25° \mathring{A} 02'25	0°04'11	min. Earth dist.	-2105 Jul 20 j 23:21	9° \mathring{C} 33'20	28.96963 AU
minimum elong	-2111 Jan 01 j 11:49	25° \mathring{A} 02'25	0°04'09	direct	-2105 Oct 08 j 01:55	8° \mathring{C} 09'04	
behind sun begin	-2111 Jan 01 j 05:28	25° \mathring{A} 01'51					
behind sun end	-2111 Jan 01 j 18:09	25° \mathring{A} 02'59		conjunction	-2104 Jan 17 j 16:37	10° \mathring{C} 36'39	0°-29'-11
max. Earth dist.	-2111 Jan 02 j 06:04	25° \mathring{A} 04'08	31.01823 AU	minimum elong	-2104 Jan 17 j 16:37	10° \mathring{C} 36'39	0°29'16
retrograde	-2111 Apr 17 j 15:46	27° \mathring{A} 35'20		max. Earth dist.	-2104 Jan 18 j 13:55	10° \mathring{C} 38'40	30.96413 AU
opposition	-2111 Jul 07 j 15:19	26° \mathring{A} 10'44	0°01'48	retrograde	-2104 May 03 j 11:03	13° \mathring{C} 10'31	
min. Earth dist.	-2111 Jul 06 j 20:33	26° \mathring{A} 12'01	29.01503 AU	opposition	-2104 Jul 23 j 09:47	11° \mathring{C} 45'38	0°-33'-44
direct	-2111 Sep 24 j 03:12	24° \mathring{A} 47'52		min. Earth dist.	-2104 Jul 22 j 12:58	11° \mathring{C} 47'04	28.95922 AU
desc. node	-2111 Nov 13 j 17:29	25° \mathring{A} 30'20		direct	-2104 Oct 09 j 12:09	10° \mathring{C} 22'47	
conjunction	-2110 Jan 03 j 22:21	27° \mathring{A} 15'18	0°00'-41	conjunction	-2103 Jan 19 j 04:01	12° \mathring{C} 50'22	0°-33'-50
minimum elong	-2110 Jan 03 j 22:23	27° \mathring{A} 15'18	0°00'45	minimum elong	-2103 Jan 19 j 04:01	12° \mathring{C} 50'22	0°33'53
behind sun begin	-2110 Jan 03 j 15:58	27° \mathring{A} 14'43		max. Earth dist.	-2103 Jan 20 j 02:32	12° \mathring{C} 52'29	30.95369 AU
behind sun end	-2110 Jan 04 j 04:48	27° \mathring{A} 15'52		retrograde	-2103 May 05 j 23:35	15° \mathring{C} 24'17	
max. Earth dist.	-2110 Jan 04 j 18:30	27° \mathring{A} 17'12	31.01156 AU	opposition	-2103 Jul 25 j 22:27	13° \mathring{C} 59'19	0°-38'-40
retrograde	-2110 Apr 20 j 05:20	29° \mathring{A} 48'23		min. Earth dist.	-2103 Jul 25 j 00:20	14° \mathring{C} 00'50	28.94887 AU
min. Earth dist.	-2110 Jul 09 j 08:29	28° \mathring{A} 25'07	29.00854 AU	direct	-2103 Oct 11 j 23:21	12° \mathring{C} 36'25	
opposition	-2110 Jul 10 j 04:15	28° \mathring{A} 23'46	0°-3'-18				
direct	-2110 Sep 26 j 16:09	27° \mathring{A} 00'57		conjunction	-2102 Jan 21 j 15:17	15° \mathring{C} 03'59	0°-38'-25
				minimum elong	-2102 Jan 21 j 15:17	15° \mathring{C} 03'59	0°38'30
conjunction	-2109 Jan 06 j 09:04	29° \mathring{A} 28'25	0°-5'-30	max. Earth dist.	-2102 Jan 22 j 13:24	15° \mathring{C} 06'04	30.94354 AU
minimum elong	-2109 Jan 06 j 09:04	29° \mathring{A} 28'25	0°05'34	retrograde	-2102 May 08 j 13:03	17° \mathring{C} 38'00	
behind sun begin	-2109 Jan 06 j 02:52	29° \mathring{A} 27'52		opposition	-2102 Jul 28 j 11:11	16° \mathring{C} 12'55	0°-43'-33
behind sun end	-2109 Jan 06 j 15:15	29° \mathring{A} 28'59		min. Earth dist.	-2102 Jul 27 j 13:23	16° \mathring{C} 14'26	28.93919 AU
max. Earth dist.	-2109 Jan 07 j 04:42	29° \mathring{A} 30'16	31.00526 AU	direct	-2102 Oct 14 j 09:34	14° \mathring{C} 49'58	
	-2109 Jan 20 j 08:11	0° \mathring{C}					
retrograde	-2109 Apr 22 j 20:32	2° \mathring{C} 01'40		conjunction	-2101 Jan 24 j 02:52	17° \mathring{C} 17'34	0°-42'-57
opposition	-2109 Jul 12 j 17:04	0° \mathring{C} 37'02	0°-8'-26	minimum elong	-2101 Jan 24 j 02:52	17° \mathring{C} 17'34	0°43'00
min. Earth dist.	-2109 Jul 11 j 20:52	0° \mathring{C} 38'25	29.00231 AU	max. Earth dist.	-2101 Jan 25 j 02:34	17° \mathring{C} 19'48	30.93421 AU
	-2109 Aug 05 j 01:06	30° \mathring{R} \mathring{A}		retrograde	-2101 May 11 j 01:53	19° \mathring{C} 51'38	
direct	-2109 Sep 29 j 03:03	29° \mathring{A} 14'15		opposition	-2101 Jul 30 j 23:35	18° \mathring{C} 26'30	0°-48'-22
	-2109 Nov 20 j 14:24	0° \mathring{C}		min. Earth dist.	-2101 Jul 30 j 00:55	18° \mathring{C} 28'04	28.93041 AU
				direct	-2101 Oct 16 j 22:04	17° \mathring{C} 03'31	
conjunction	-2108 Jan 08 j 20:00	1° \mathring{C} 41'47	0°-10'-16	conjunction	-2100 Jan 26 j 14:21	19° \mathring{C} 31'08	0°-47'-26
minimum elong	-2108 Jan 08 j 20:00	1° \mathring{C} 41'47	0°10'21	minimum elong	-2100 Jan 26 j 14:20	19° \mathring{C} 31'08	0°47'30
behind sun begin	-2108 Jan 08 j 14:53	1° \mathring{C} 41'19		max. Earth dist.	-2100 Jan 27 j 13:30	19° \mathring{C} 33'19	30.92605 AU
behind sun end	-2108 Jan 09 j 01:07	1° \mathring{C} 42'15		retrograde	-2100 May 12 j 16:33	22° \mathring{C} 05'18	
max. Earth dist.	-2108 Jan 09 j 17:00	1° \mathring{C} 43'46	30.99878 AU				

Attention, astronomical year style is used: The year -2100 in astronomical counting style is the year 2101 BCE in historical counting style.

opposition	-2100 Aug 01 j 12:10	20°34'07"	0°-53'-7	opposition	-2092 Aug 19 j 15:41	8°34'28"	-1°-27'-46
min. Earth dist.	-2100 Jul 31 j 13:00	20°34'43"	28.92297 AU	min. Earth dist.	-2092 Aug 18 j 16:31	8°36'05"	28.87559 AU
direct	-2100 Oct 18 j 08:33	19°31'06"		direct	-2092 Nov 05 j 02:58	7°11'22"	
conjunction	-2099 Jan 28 j 01:54	21°34'46"	0°-51'-50	conjunction	-2091 Feb 15 j 03:57	9°39'35"	-1°-23'-50
minimum elong	-2099 Jan 28 j 01:54	21°34'46"	0°51'53	minimum elong	-2091 Feb 15 j 03:56	9°39'35"	1°23'53
max. Earth dist.	-2099 Jan 29 j 02:31	21°34'06"	30.91910 AU	max. Earth dist.	-2091 Feb 16 j 03:52	9°41'50"	30.87068 AU
retrograde	-2099 May 15 j 05:00	24°31'02"		retrograde	-2091 Jun 02 j 16:49	12°14'28"	
min. Earth dist.	-2099 Aug 03 j 01:24	22°35'26"	28.91662 AU	min. Earth dist.	-2091 Aug 21 j 05:00	10°50'43"	28.86756 AU
opposition	-2099 Aug 04 j 00:44	22°35'49"	0°-57'-48	opposition	-2091 Aug 22 j 03:57	10°49'07"	-1°-31'-34
direct	-2099 Oct 20 j 20:23	21°30'49"		direct	-2091 Nov 07 j 13:29	9°25'56"	
conjunction	-2098 Jan 30 j 13:40	23°35'32"	0°-56'-10	conjunction	-2090 Feb 17 j 16:43	11°54'12"	-1°-27'-19
minimum elong	-2098 Jan 30 j 13:40	23°35'32"	0°56'14	minimum elong	-2090 Feb 17 j 16:43	11°54'12"	1°27'23
max. Earth dist.	-2098 Jan 31 j 14:07	24°30'50"	30.91334 AU	max. Earth dist.	-2090 Feb 18 j 17:34	11°56'32"	30.86263 AU
retrograde	-2098 May 17 j 20:14	26°32'53"		retrograde	-2090 Jun 05 j 05:21	14°29'05"	
opposition	-2098 Aug 06 j 13:06	25°30'74"	-1°-2'-23	opposition	-2090 Aug 24 j 15:56	13°03'41"	-1°-35'-13
min. Earth dist.	-2098 Aug 05 j 12:56	25°30'92"	28.91134 AU	min. Earth dist.	-2090 Aug 23 j 17:16	13°05'16"	28.85983 AU
direct	-2098 Oct 23 j 08:11	23°34'40"		direct	-2090 Nov 10 j 01:31	11°40'26"	
conjunction	-2097 Feb 02 j 01:37	26°31'28"	-1°00'-25	conjunction	-2089 Feb 20 j 05:25	14°08'45"	-1°-30'-41
minimum elong	-2097 Feb 02 j 01:36	26°31'28"	1°00'28	minimum elong	-2089 Feb 20 j 05:24	14°08'45"	1°30'43
max. Earth dist.	-2097 Feb 03 j 02:41	26°31'45"	30.90825 AU	max. Earth dist.	-2089 Feb 21 j 05:39	14°11'02"	30.85534 AU
retrograde	-2097 May 20 j 09:17	28°34'56"			-2089 Mar 15 j 07:07	15°	
min. Earth dist.	-2097 Aug 08 j 02:13	27°32'20"	28.90655 AU	retrograde	-2089 Jun 07 j 20:52	16°43'38"	
opposition	-2097 Aug 09 j 01:38	27°32'143"	-1°-6'-53	min. Earth dist.	-2089 Aug 26 j 04:40	15°19'49"	28.85314 AU
direct	-2097 Oct 25 j 19:26	25°35'844"		opposition	-2089 Aug 27 j 03:54	15°18'11"	-1°-38'-44
conjunction	-2096 Feb 04 j 13:36	28°32'36"	-1°-4'-35	direct	-2089 Sep 07 j 01:45	15°R	
minimum elong	-2096 Feb 04 j 13:36	28°32'36"	1°04'39		-2089 Nov 12 j 14:13	13°54'52"	
max. Earth dist.	-2096 Feb 05 j 14:55	28°32'900"	30.90359 AU		-2088 Jan 14 j 19:21	15°	
retrograde	-2096 Mar 19 j 18:18	0°		conjunction	-2088 Feb 22 j 18:02	16°23'15"	-1°-33'-54
	-2096 May 21 j 22:49	1°01'11"		minimum elong	-2088 Feb 22 j 18:02	16°23'15"	1°33'57
	-2096 Jul 26 j 23:04	30°R3		max. Earth dist.	-2088 Feb 23 j 18:51	16°25'35"	30.84909 AU
opposition	-2096 Aug 10 j 14:03	29°35'59"	-1°-11'-17	retrograde	-2088 Jun 09 j 09:16	18°58'10"	
min. Earth dist.	-2096 Aug 09 j 13:37	29°37'41"	28.90187 AU	opposition	-2088 Aug 28 j 15:57	17°32'40"	-1°-42'-6
direct	-2096 Oct 27 j 07:08	28°31'300"		min. Earth dist.	-2088 Aug 27 j 17:26	17°34'15"	28.84767 AU
	-2095 Jan 18 j 19:19	0°		direct	-2088 Nov 14 j 02:01	16°09'19"	
conjunction	-2095 Feb 06 j 01:49	0°40'58"	-1°-8'-39	conjunction	-2087 Feb 24 j 06:54	18°37'45"	-1°-36'-59
minimum elong	-2095 Feb 06 j 01:49	0°40'58"	1°08'42	minimum elong	-2087 Feb 24 j 06:53	18°37'45"	1°37'01
max. Earth dist.	-2095 Feb 07 j 02:40	0°43'19"	30.89864 AU	max. Earth dist.	-2087 Feb 25 j 07:49	18°40'06"	30.84441 AU
retrograde	-2095 May 24 j 11:24	3°15'39"		retrograde	-2087 Jun 11 j 23:18	21°12'41"	
min. Earth dist.	-2095 Aug 12 j 03:19	1°52'04"	28.89676 AU	min. Earth dist.	-2087 Aug 30 j 04:10	19°48'50"	28.84378 AU
opposition	-2095 Aug 13 j 02:37	1°50'27"	-1°-15'-35	opposition	-2087 Aug 31 j 03:43	19°47'11"	-1°-45'-19
direct	-2095 Oct 29 j 17:06	0°27'29"		direct	-2087 Nov 16 j 14:05	18°23'47"	
conjunction	-2094 Feb 08 j 14:20	2°55'31"	-1°-12'-37	conjunction	-2086 Feb 26 j 19:48	20°52'18"	-1°-39'-55
minimum elong	-2094 Feb 08 j 14:20	2°55'31"	1°12'41	minimum elong	-2086 Feb 26 j 19:48	20°52'18"	1°39'58
max. Earth dist.	-2094 Feb 09 j 15:46	2°57'55"	30.89308 AU	max. Earth dist.	-2086 Feb 27 j 20:22	20°54'37"	30.84112 AU
retrograde	-2094 May 27 j 00:49	5°30'17"		retrograde	-2086 Jun 14 j 12:29	23°27'15"	
opposition	-2094 Aug 15 j 15:01	4°05'04"	-1°-19'-46	opposition	-2086 Sep 02 j 15:40	22°01'45"	-1°-48'-23
min. Earth dist.	-2094 Aug 14 j 15:02	4°06'44"	28.89066 AU	min. Earth dist.	-2086 Sep 01 j 17:06	22°03'20"	28.84126 AU
direct	-2094 Nov 01 j 04:20	2°42'04"		direct	-2086 Nov 19 j 00:40	20°38'21"	
conjunction	-2093 Feb 11 j 02:51	5°10'11"	-1°-16'-28	conjunction	-2085 Mar 01 j 08:54	23°06'57"	-1°-42'-42
minimum elong	-2093 Feb 11 j 02:51	5°10'11"	1°16'31	minimum elong	-2085 Mar 01 j 08:54	23°06'57"	1°42'44
max. Earth dist.	-2093 Feb 12 j 03:02	5°12'28"	30.88637 AU	max. Earth dist.	-2085 Mar 02 j 10:09	23°09'20"	30.83922 AU
retrograde	-2093 May 29 j 13:56	7°45'01"		retrograde	-2085 Jun 17 j 01:56	25°41'54"	
min. Earth dist.	-2093 Aug 17 j 04:29	6°21'22"	28.88355 AU	min. Earth dist.	-2085 Sep 04 j 03:56	24°18'05"	28.83988 AU
opposition	-2093 Aug 18 j 03:24	6°19'46"	-1°-23'-49	opposition	-2085 Sep 05 j 03:18	24°16'26"	-1°-51'-16
direct	-2093 Nov 03 j 14:34	4°56'44"		direct	-2085 Nov 21 j 12:15	22°53'01"	
conjunction	-2092 Feb 13 j 15:31	7°24'54"	-1°-20'-13	conjunction	-2084 Mar 02 j 21:58	25°21'43"	-1°-45'-19
minimum elong	-2092 Feb 13 j 15:31	7°24'54"	1°20'16	minimum elong	-2084 Mar 02 j 21:58	25°21'43"	1°45'22
max. Earth dist.	-2092 Feb 14 j 16:36	7°27'16"	30.87877 AU	max. Earth dist.	-2084 Mar 03 j 22:11	25°24'00"	30.83826 AU
retrograde	-2092 May 31 j 02:32	9°59'45"		retrograde	-2084 Jun 18 j 14:12	27°56'42"	

Attention, astronomical year style is used: The year -2084 in astronomical counting style is the year 2085 BCE in historical counting style.

opposition	-2084 Sep 06 j 15:09	26° \approx 31'16	-1°-53'-59	max. Earth dist.	-2076 Mar 22 j 08:09	13° \approx 23'45	30.82377 AU
min. Earth dist.	-2084 Sep 05 j 16:50	26° \approx 32'50	28.83936 AU	retrograde	-2076 Jul 07 j 00:59	15° \approx 56'27	
direct	-2084 Nov 22 j 22:09	25° \approx 07'50		opposition	-2076 Sep 24 j 11:34	14° \approx 31'01	-2°-9'-14
				min. Earth dist.	-2076 Sep 23 j 16:43	14° \approx 32'21	28.82487 AU
conjunction	-2083 Mar 05 j 11:20	27° \approx 36'38	-1°-47'-47	direct	-2076 Dec 10 j 20:47	13° \approx 07'10	
minimum elong	-2083 Mar 05 j 11:20	27° \approx 36'38	1°47'49				
max. Earth dist.	-2083 Mar 06 j 12:21	27° \approx 38'59	30.83784 AU	conjunction	-2075 Mar 24 j 00:59	15° \approx 36'34	-2°-1'-22
	-2083 May 25 j 10:28	0° \approx		minimum elong	-2075 Mar 24 j 00:58	15° \approx 36'34	2°01'23
retrograde	-2083 Jun 21 j 02:24	0° \approx 11'38		max. Earth dist.	-2075 Mar 24 j 20:40	15° \approx 38'25	30.82331 AU
	-2083 Jul 18 j 03:03	30° \approx		retrograde	-2075 Jul 09 j 13:01	18° \approx 11'11	
min. Earth dist.	-2083 Sep 08 j 04:37	28° \approx 47'48	28.83890 AU	opposition	-2075 Sep 26 j 22:53	16° \approx 45'46	-2°-10'-17
opposition	-2083 Sep 09 j 02:53	28° \approx 46'14	-1°-56'-32	min. Earth dist.	-2075 Sep 26 j 05:08	16° \approx 47'02	28.82521 AU
direct	-2083 Nov 25 j 09:44	27° \approx 22'48		direct	-2075 Dec 13 j 07:05	15° \approx 21'53	
conjunction	-2082 Mar 08 j 00:50	29° \approx 51'41	-1°-50'-5	conjunction	-2074 Mar 26 j 15:00	17° \approx 51'22	-2°-2'-15
minimum elong	-2082 Mar 08 j 00:50	29° \approx 51'41	1°50'07	minimum elong	-2074 Mar 26 j 15:00	17° \approx 51'22	2°02'16
max. Earth dist.	-2082 Mar 09 j 00:09	29° \approx 53'53	30.83722 AU	max. Earth dist.	-2074 Mar 27 j 11:23	17° \approx 53'17	30.82434 AU
	-2082 Mar 11 j 17:12	0° \approx		retrograde	-2074 Jul 12 j 00:59	20° \approx 25'54	
retrograde	-2082 Jun 23 j 16:42	2° \approx 26'41		opposition	-2074 Sep 29 j 09:55	19° \approx 00'33	-2°-11'-8
opposition	-2082 Sep 11 j 14:33	1° \approx 01'18	-1°-58'-54	min. Earth dist.	-2074 Sep 28 j 16:06	19° \approx 01'49	28.82692 AU
min. Earth dist.	-2082 Sep 10 j 17:02	1° \approx 02'49	28.83809 AU	direct	-2074 Dec 15 j 18:32	17° \approx 36'39	
	-2082 Oct 22 j 06:46	30° \approx					
direct	-2082 Nov 27 j 19:35	29° \approx 37'50		conjunction	-2073 Mar 29 j 04:52	20° \approx 06'14	-2°-2'-57
	-2081 Jan 02 j 19:16	0° \approx		minimum elong	-2073 Mar 29 j 04:52	20° \approx 06'14	2°02'58
				max. Earth dist.	-2073 Mar 29 j 23:43	20° \approx 08'00	30.82684 AU
conjunction	-2081 Mar 10 j 14:36	2° \approx 06'49	-1°-52'-13	retrograde	-2073 Jul 14 j 14:34	22° \approx 40'44	
minimum elong	-2081 Mar 10 j 14:36	2° \approx 06'49	1°52'15	opposition	-2073 Oct 01 j 21:09	21° \approx 15'26	-2°-11'-46
max. Earth dist.	-2081 Mar 11 j 14:10	2° \approx 09'02	30.83590 AU	min. Earth dist.	-2073 Oct 01 j 03:48	21° \approx 16'40	28.83017 AU
retrograde	-2081 Jun 26 j 04:55	4° \approx 41'48		direct	-2073 Dec 18 j 03:53	19° \approx 51'31	
min. Earth dist.	-2081 Sep 13 j 05:38	3° \approx 17'53	28.83634 AU				
opposition	-2081 Sep 14 j 02:19	3° \approx 16'26	-2°-1'-6	conjunction	-2072 Mar 30 j 18:49	22° \approx 21'13	-2°-3'-27
direct	-2081 Nov 30 j 07:44	1° \approx 52'55		minimum elong	-2072 Mar 30 j 18:49	22° \approx 21'13	2°03'29
				max. Earth dist.	-2072 Mar 31 j 14:16	22° \approx 23'03	30.83062 AU
conjunction	-2080 Mar 12 j 04:08	4° \approx 21'58	-1°-54'-11	retrograde	-2072 Jul 16 j 01:51	24° \approx 55'40	
minimum elong	-2080 Mar 12 j 04:08	4° \approx 21'58	1°54'13	opposition	-2072 Oct 03 j 08:19	23° \approx 30'28	-2°-12'-13
max. Earth dist.	-2080 Mar 13 j 02:17	4° \approx 24'03	30.83380 AU	min. Earth dist.	-2072 Oct 02 j 15:41	23° \approx 31'38	28.83437 AU
retrograde	-2080 Jun 27 j 19:49	6° \approx 56'54		direct	-2072 Dec 19 j 15:38	22° \approx 06'32	
opposition	-2080 Sep 15 j 14:01	5° \approx 31'31	-2°-3'-6				
min. Earth dist.	-2080 Sep 14 j 17:24	5° \approx 32'58	28.83389 AU	conjunction	-2071 Apr 02 j 08:57	24° \approx 36'22	-2°-3'-46
direct	-2080 Dec 01 j 20:15	4° \approx 07'56		minimum elong	-2071 Apr 02 j 08:57	24° \approx 36'22	2°03'48
				max. Earth dist.	-2071 Apr 03 j 02:52	24° \approx 38'02	30.83528 AU
conjunction	-2079 Mar 14 j 17:56	6° \approx 37'04	-1°-55'-59	retrograde	-2071 Jul 18 j 16:05	27° \approx 10'46	
minimum elong	-2079 Mar 14 j 17:55	6° \approx 37'04	1°56'01	opposition	-2071 Oct 05 j 19:19	25° \approx 45'38	-2°-12'-27
max. Earth dist.	-2079 Mar 15 j 15:58	6° \approx 39'08	30.83098 AU	min. Earth dist.	-2071 Oct 05 j 02:56	25° \approx 46'48	28.83921 AU
retrograde	-2079 Jun 30 j 07:56	9° \approx 11'56		direct	-2071 Dec 22 j 03:24	24° \approx 21'42	
min. Earth dist.	-2079 Sep 17 j 06:25	7° \approx 47'53	28.83095 AU				
opposition	-2079 Sep 18 j 01:34	7° \approx 46'32	-2°-4'-55	conjunction	-2070 Apr 04 j 23:20	26° \approx 51'40	-2°-3'-54
direct	-2079 Dec 04 j 08:07	6° \approx 22'52		minimum elong	-2070 Apr 04 j 23:20	26° \approx 51'40	2°03'55
				max. Earth dist.	-2070 Apr 05 j 17:01	26° \approx 53'19	30.84001 AU
conjunction	-2078 Mar 17 j 07:46	8° \approx 52'04	-1°-57'-36	retrograde	-2070 Jul 21 j 04:09	29° \approx 26'00	
minimum elong	-2078 Mar 17 j 07:46	8° \approx 52'04	1°57'38	opposition	-2070 Oct 08 j 06:29	28° \approx 00'57	-2°-12'-29
max. Earth dist.	-2078 Mar 18 j 05:07	8° \approx 54'04	30.82810 AU	min. Earth dist.	-2070 Oct 07 j 15:50	28° \approx 01'59	28.84378 AU
retrograde	-2078 Jul 02 j 22:33	11° \approx 26'52		direct	-2070 Dec 24 j 14:29	26° \approx 37'00	
opposition	-2078 Sep 20 j 12:58	10° \approx 01'27	-2°-6'-33				
min. Earth dist.	-2078 Sep 19 j 17:23	10° \approx 02'50	28.82816 AU	conjunction	-2069 Apr 07 j 13:39	29° \approx 07'04	-2°-3'-50
direct	-2078 Dec 06 j 21:00	8° \approx 37'42		minimum elong	-2069 Apr 07 j 13:39	29° \approx 07'04	2°03'51
				max. Earth dist.	-2069 Apr 08 j 06:03	29° \approx 08'36	30.84432 AU
conjunction	-2077 Mar 19 j 21:27	11° \approx 06'58	-1°-59'-2		-2069 May 01 j 14:43	0° \approx	
minimum elong	-2077 Mar 19 j 21:27	11° \approx 06'58	1°59'04	retrograde	-2069 Jul 23 j 18:54	1° \approx 41'19	
max. Earth dist.	-2077 Mar 20 j 18:03	11° \approx 08'54	30.82542 AU	opposition	-2069 Oct 10 j 17:32	0° \approx 16'19	-2°-12'-19
retrograde	-2077 Jul 05 j 11:41	13° \approx 41'42		min. Earth dist.	-2069 Oct 10 j 02:52	0° \approx 17'22	28.84764 AU
min. Earth dist.	-2077 Sep 22 j 06:08	12° \approx 17'33	28.82596 AU		-2069 Oct 20 j 09:00	30° \approx	
opposition	-2077 Sep 23 j 00:22	12° \approx 16'16	-2°-8'00	direct	-2069 Dec 27 j 03:43	28° \approx 52'21	
direct	-2077 Dec 09 j 08:22	10° \approx 52'28			-2068 Mar 01 j 08:14	0° \approx	
conjunction	-2076 Mar 21 j 11:17	13° \approx 21'47	-2°00'-17	conjunction	-2068 Apr 09 j 04:05	1° \approx 22'30	-2°-3'-35
minimum elong	-2076 Mar 21 j 11:17	13° \approx 21'47	2°00'19	minimum elong	-2068 Apr 09 j 04:06	1° \approx 22'30	2°03'36

Planetary Phenomena of Neptune from -2400 through -1900 (UT), Astrodienst AG 7-Dez-2017 14:42, page 22

Attention, astronomical year style is used: The year -2068 in astronomical counting style is the year 2069 BCE in historical counting style.

max. Earth dist.	-2068 Apr 09 j 19:12	1°Υ23'55	30.84767 AU	min. Earth dist.	-2060 Oct 29 j 10:27	20°Υ30'03	28.87887 AU
retrograde	-2068 Jul 25 j 08:06	3°Υ56'40		direct	-2059 Jan 15 j 14:57	19°Υ04'59	
opposition	-2068 Oct 12 j 04:40	2°Υ31'41	-2°-11'-56				
min. Earth dist.	-2068 Oct 11 j 15:55	2°Υ32'35	28.85058 AU	conjunction	-2059 Apr 30 j 13:33	21°Υ35'43	-1°-53'-4
direct	-2068 Dec 28 j 15:55	1°Υ07'40		minimum elong	-2059 Apr 30 j 13:33	21°Υ35'43	1°53'05
				max. Earth dist.	-2059 Apr 30 j 21:12	21°Υ36'26	30.88154 AU
conjunction	-2067 Apr 11 j 18:36	3°Υ37'53	-2°-3'-9	retrograde	-2059 Aug 14 j 21:57	24°Υ08'35	
minimum elong	-2067 Apr 11 j 18:36	3°Υ37'53	2°03'10	opposition	-2059 Nov 01 j 04:58	22°Υ43'59	-1°-59'-48
max. Earth dist.	-2067 Apr 12 j 09:03	3°Υ39'14	30.85025 AU	min. Earth dist.	-2059 Oct 31 j 22:52	22°Υ44'25	28.88674 AU
retrograde	-2067 Jul 27 j 21:23	6°Υ11'54		direct	-2058 Jan 18 j 02:42	21°Υ19'28	
opposition	-2067 Oct 14 j 15:35	4°Υ46'57	-2°-11'-22				
min. Earth dist.	-2067 Oct 14 j 02:53	4°Υ47'51	28.85264 AU	conjunction	-2058 May 03 j 04:03	23°Υ50'20	-1°-51'00
direct	-2067 Dec 31 j 05:38	3°Υ22'51		minimum elong	-2058 May 03 j 04:04	23°Υ50'20	1°50'59
				max. Earth dist.	-2058 May 03 j 11:01	23°Υ50'58	30.88965 AU
conjunction	-2066 Apr 14 j 09:03	5°Υ53'08	-2°-2'-32	retrograde	-2058 Aug 17 j 11:11	26°Υ23'04	
minimum elong	-2066 Apr 14 j 09:04	5°Υ53'08	2°02'32	opposition	-2058 Nov 03 j 15:22	24°Υ58'34	-1°-57'-30
max. Earth dist.	-2066 Apr 14 j 21:39	5°Υ54'18	30.85204 AU	min. Earth dist.	-2058 Nov 03 j 09:20	24°Υ59'00	28.89472 AU
retrograde	-2066 Jul 30 j 09:53	8°Υ26'59		direct	-2057 Jan 20 j 16:03	23°Υ34'04	
opposition	-2066 Oct 17 j 02:28	7°Υ02'03	-2°-10'-36				
min. Earth dist.	-2066 Oct 16 j 15:27	7°Υ02'50	28.85430 AU	conjunction	-2057 May 05 j 18:30	26°Υ05'02	-1°-48'-46
direct	-2065 Jan 02 j 16:37	5°Υ37'52		minimum elong	-2057 May 05 j 18:31	26°Υ05'02	1°48'46
				max. Earth dist.	-2057 May 05 j 23:37	26°Υ05'30	30.89750 AU
conjunction	-2065 Apr 16 j 23:34	8°Υ08'12	-2°-1'-43	retrograde	-2057 Aug 20 j 00:12	28°Υ37'39	
minimum elong	-2065 Apr 16 j 23:34	8°Υ08'12	2°01'44	opposition	-2057 Nov 06 j 02:00	27°Υ13'15	-1°-55'-2
max. Earth dist.	-2065 Apr 17 j 12:19	8°Υ09'23	30.85370 AU	min. Earth dist.	-2057 Nov 05 j 21:45	27°Υ13'33	28.90234 AU
retrograde	-2065 Aug 01 j 22:25	10°Υ41'53		direct	-2056 Jan 23 j 02:59	25°Υ48'44	
opposition	-2065 Oct 19 j 13:14	9°Υ16'57	-2°-9'-39				
min. Earth dist.	-2065 Oct 19 j 02:33	9°Υ17'43	28.85597 AU	conjunction	-2056 May 07 j 09:01	28°Υ19'47	-1°-46'-22
direct	-2064 Jan 05 j 05:21	7°Υ52'42		minimum elong	-2056 May 07 j 09:01	28°Υ19'47	1°46'21
				max. Earth dist.	-2056 May 07 j 13:52	28°Υ20'14	30.90475 AU
conjunction	-2064 Apr 18 j 13:43	10°Υ23'04	-2°00'-44		-2056 Jun 25 j 03:46	0°Ϡ	
minimum elong	-2064 Apr 18 j 13:43	10°Υ23'04	2°00'44	retrograde	-2056 Aug 21 j 13:11	0°Ϡ52'15	
max. Earth dist.	-2064 Apr 19 j 00:35	10°Υ24'04	30.85567 AU		-2056 Oct 19 j 05:29	30°ϠΥ	
retrograde	-2064 Aug 03 j 10:31	12°Υ56'36		opposition	-2056 Nov 07 j 12:34	29°Υ27'56	-1°-52'-23
opposition	-2064 Oct 21 j 00:01	11°Υ31'41	-2°-8'-29	min. Earth dist.	-2056 Nov 07 j 09:01	29°Υ28'11	28.90897 AU
min. Earth dist.	-2064 Oct 20 j 14:08	11°Υ32'23	28.85830 AU	direct	-2055 Jan 24 j 16:12	28°Υ03'24	
direct	-2063 Jan 06 j 15:55	10°Υ07'20			-2055 Apr 24 j 09:29	0°Ϡ	
conjunction	-2063 Apr 21 j 04:13	12°Υ37'45	-1°-59'-34	conjunction	-2055 May 09 j 23:31	0°Ϡ34'31	-1°-43'-49
minimum elong	-2063 Apr 21 j 04:13	12°Υ37'45	1°59'34	minimum elong	-2055 May 09 j 23:31	0°Ϡ34'31	1°43'49
max. Earth dist.	-2063 Apr 21 j 15:23	12°Υ38'47	30.85838 AU	max. Earth dist.	-2055 May 10 j 01:56	0°Ϡ34'44	30.91098 AU
retrograde	-2063 Aug 05 j 20:40	15°Υ11'08		retrograde	-2055 Aug 24 j 01:04	3°Ϡ06'50	
opposition	-2063 Oct 23 j 10:36	13°Υ46'14	-2°-7'-8	opposition	-2055 Nov 09 j 23:00	1°Ϡ42'34	-1°-49'-34
min. Earth dist.	-2063 Oct 23 j 01:35	13°Υ46'53	28.86147 AU	min. Earth dist.	-2055 Nov 09 j 20:40	1°Ϡ42'44	28.91475 AU
direct	-2062 Jan 09 j 04:02	12°Υ21'50		direct	-2054 Jan 27 j 03:13	0°Ϡ17'58	
conjunction	-2062 Apr 23 j 18:33	14°Υ52'18	-1°-58'-12	conjunction	-2054 May 12 j 14:07	2°Ϡ49'09	-1°-41'-6
minimum elong	-2062 Apr 23 j 18:33	14°Υ52'18	1°58'12	minimum elong	-2054 May 12 j 14:08	2°Ϡ49'09	1°41'06
max. Earth dist.	-2062 Apr 24 j 04:00	14°Υ53'11	30.86226 AU	max. Earth dist.	-2054 May 12 j 16:23	2°Ϡ49'22	30.91636 AU
retrograde	-2062 Aug 08 j 09:32	17°Υ25'32		retrograde	-2054 Aug 26 j 11:12	5°Ϡ21'17	
opposition	-2062 Oct 25 j 21:14	16°Υ00'41	-2°-5'-35	opposition	-2054 Nov 12 j 09:31	3°Ϡ57'05	-1°-46'-35
min. Earth dist.	-2062 Oct 25 j 12:14	16°Υ01'19	28.86598 AU	min. Earth dist.	-2054 Nov 12 j 08:26	3°Ϡ57'10	28.91971 AU
direct	-2061 Jan 11 j 15:18	14°Υ36'13		direct	-2053 Jan 29 j 15:40	2°Ϡ32'26	
conjunction	-2061 Apr 26 j 08:49	17°Υ06'46	-1°-56'-40	conjunction	-2053 May 15 j 04:16	5°Ϡ03'38	-1°-38'-15
minimum elong	-2061 Apr 26 j 08:49	17°Υ06'46	1°56'41	minimum elong	-2053 May 15 j 04:16	5°Ϡ03'38	1°38'15
max. Earth dist.	-2061 Apr 26 j 18:24	17°Υ07'39	30.86737 AU	max. Earth dist.	-2053 May 15 j 04:22	5°Ϡ03'39	30.92125 AU
retrograde	-2061 Aug 10 j 20:20	19°Υ39'52		retrograde	-2053 Aug 28 j 23:32	7°Ϡ35'35	
opposition	-2061 Oct 28 j 07:54	18°Υ15'05	-2°-3'-51	opposition	-2053 Nov 14 j 19:49	6°Ϡ11'25	-1°-43'-27
min. Earth dist.	-2061 Oct 28 j 00:17	18°Υ15'37	28.87176 AU	min. Earth dist.	-2053 Nov 14 j 19:05	6°Ϡ11'28	28.92449 AU
direct	-2060 Jan 14 j 02:00	16°Υ50'35		direct	-2052 Feb 01 j 02:47	4°Ϡ46'41	
conjunction	-2060 Apr 27 j 23:08	19°Υ21'13	-1°-54'-57	conjunction	-2052 May 16 j 18:36	7°Ϡ17'56	-1°-35'-15
minimum elong	-2060 Apr 27 j 23:08	19°Υ21'13	1°54'58	minimum elong	-2052 May 16 j 18:37	7°Ϡ17'56	1°35'14
max. Earth dist.	-2060 Apr 28 j 07:37	19°Υ22'00	30.87398 AU	max. Earth dist.	-2052 May 16 j 18:35	7°Ϡ17'56	30.92606 AU
retrograde	-2060 Aug 12 j 09:44	21°Υ54'11		retrograde	-2052 Aug 30 j 09:08	9°Ϡ49'42	
opposition	-2060 Oct 29 j 18:20	20°Υ29'29	-2°-1'-55	opposition	-2052 Nov 16 j 06:05	8°Ϡ25'34	-1°-40'-11

Attention, astronomical year style is used: The year -2052 in astronomical counting style is the year 2053 BCE in historical counting style.

min. Earth dist.	-2052 Nov 16 j 07:03	8° 8 25'29	28.92941 AU	min. Earth dist.	-2044 Dec 03 j 21:44	26° 8 14'12	29.00251 AU
direct	-2051 Feb 02 j 13:13	7° 8 00'45		direct	-2043 Feb 20 j 15:30	24° 8 49'38	
conjunction	-2051 May 19 j 08:48	9° 8 32'01	-1°-32'-7	conjunction	-2043 Jun 07 j 00:44	27° 8 21'21	-1°-2'-31
minimum elong	-2051 May 19 j 08:49	9° 8 32'01	1°32'07	minimum elong	-2043 Jun 07 j 00:45	27° 8 21'21	1°02'30
max. Earth dist.	-2051 May 19 j 07:21	9° 8 31'53	30.93139 AU	max. Earth dist.	-2043 Jun 06 j 16:36	27° 8 20'36	31.00690 AU
retrograde	-2051 Sep 01 j 20:40	12° 8 03'35		retrograde	-2043 Sep 19 j 16:08	29° 8 51'34	
opposition	-2051 Nov 18 j 16:14	10° 8 39'30	-1°-36'-45	opposition	-2043 Dec 06 j 01:52	28° 8 28'09	-1°-4'-37
min. Earth dist.	-2051 Nov 18 j 17:02	10° 8 39'26	28.93503 AU	min. Earth dist.	-2043 Dec 06 j 10:03	28° 8 27'34	29.01187 AU
direct	-2050 Feb 05 j 02:49	9° 8 14'36		direct	-2042 Feb 23 j 02:26	27° 8 03'07	
conjunction	-2050 May 21 j 22:54	11° 8 45'56	-1°-28'-51	conjunction	-2042 Jun 09 j 14:31	29° 8 34'51	0°-58'-20
minimum elong	-2050 May 21 j 22:55	11° 8 45'56	1°28'49	minimum elong	-2042 Jun 09 j 14:31	29° 8 34'51	0°58'19
max. Earth dist.	-2050 May 21 j 20:51	11° 8 45'44	30.93743 AU	max. Earth dist.	-2042 Jun 09 j 04:35	29° 8 33'56	31.01586 AU
retrograde	-2050 Sep 04 j 07:06	14° 8 17'18			-2042 Jun 20 j 22:37	0° II	
opposition	-2050 Nov 21 j 02:29	12° 8 53'15	-1°-33'-11	retrograde	-2042 Sep 22 j 03:09	2° II 04'54	
min. Earth dist.	-2050 Nov 21 j 04:51	12° 8 53'05	28.94170 AU	opposition	-2042 Dec 08 j 12:01	0° II 41'33	-1°00'-7
direct	-2049 Feb 07 j 14:23	11° 8 28'19		min. Earth dist.	-2042 Dec 08 j 20:15	0° II 40'58	29.02031 AU
conjunction	-2049 May 24 j 12:56	13° 8 59'40	-1°-25'-27		-2041 Jan 03 j 02:31	30° R 8	
minimum elong	-2049 May 24 j 12:56	13° 8 59'40	1°25'26	direct	-2041 Feb 25 j 15:28	29° 8 16'28	
max. Earth dist.	-2049 May 24 j 10:20	13° 8 59'26	30.94489 AU		-2041 Apr 19 j 03:14	0° II	
	-2049 Jun 21 j 07:53	15° 8		conjunction	-2041 Jun 12 j 04:19	1° II 48'13	0°-54'-5
retrograde	-2049 Sep 06 j 19:13	16° 8 30'52		minimum elong	-2041 Jun 12 j 04:19	1° II 48'13	0°54'04
opposition	-2049 Nov 23 j 12:36	15° 8 06'52	-1°-29'-29	max. Earth dist.	-2041 Jun 11 j 17:34	1° II 47'14	31.02390 AU
min. Earth dist.	-2049 Nov 23 j 14:35	15° 8 06'44	28.94976 AU	retrograde	-2041 Sep 24 j 13:02	4° II 18'05	
	-2049 Nov 27 j 13:28	15° R 8		opposition	-2041 Dec 10 j 22:15	2° II 54'47	0°-55'-31
direct	-2048 Feb 10 j 03:33	13° 8 41'53		min. Earth dist.	-2041 Dec 11 j 08:22	2° II 54'04	29.02809 AU
	-2048 Apr 21 j 19:17	15° 8		direct	-2040 Feb 28 j 02:27	1° II 29'39	
conjunction	-2048 May 26 j 02:48	16° 8 13'18	-1°-21'-55	conjunction	-2040 Jun 13 j 17:55	4° II 01'25	0°-49'-45
minimum elong	-2048 May 26 j 02:48	16° 8 13'18	1°21'53	minimum elong	-2040 Jun 13 j 17:55	4° II 01'25	0°49'43
max. Earth dist.	-2048 May 25 j 22:56	16° 8 12'56	30.95371 AU	max. Earth dist.	-2040 Jun 13 j 06:15	4° II 00'20	31.03156 AU
retrograde	-2048 Sep 08 j 07:28	18° 8 44'20		retrograde	-2040 Sep 26 j 00:17	6° II 31'05	
opposition	-2048 Nov 24 j 22:51	17° 8 20'25	-1°-25'-38	opposition	-2040 Dec 12 j 08:21	5° II 07'50	0°-50'-51
min. Earth dist.	-2048 Nov 25 j 02:07	17° 8 20'11	28.95928 AU	min. Earth dist.	-2040 Dec 12 j 18:25	5° II 07'07	29.03547 AU
direct	-2047 Feb 11 j 14:59	15° 8 55'25		direct	-2039 Mar 01 j 15:42	3° II 42'39	
conjunction	-2047 May 28 j 16:53	18° 8 26'53	-1°-18'-15	conjunction	-2039 Jun 16 j 07:27	6° II 14'26	0°-45'-21
minimum elong	-2047 May 28 j 16:54	18° 8 26'53	1°18'15	minimum elong	-2039 Jun 16 j 07:27	6° II 14'26	0°45'20
max. Earth dist.	-2047 May 28 j 13:08	18° 8 26'32	30.96391 AU	max. Earth dist.	-2039 Jun 15 j 18:24	6° II 13'13	31.03894 AU
retrograde	-2047 Sep 10 j 19:39	20° 8 57'45		retrograde	-2039 Sep 28 j 11:35	8° II 43'55	
opposition	-2047 Nov 27 j 08:54	19° 8 33'56	-1°-21'-40	opposition	-2039 Dec 14 j 18:28	7° II 20'42	0°-46'-7
min. Earth dist.	-2047 Nov 27 j 12:36	19° 8 33'40	28.96981 AU	min. Earth dist.	-2039 Dec 15 j 05:57	7° II 19'53	29.04304 AU
direct	-2046 Feb 14 j 04:49	18° 8 08'57		direct	-2038 Mar 04 j 03:31	5° II 55'29	
conjunction	-2046 May 31 j 06:49	20° 8 40'29	-1°-14'-29	conjunction	-2038 Jun 18 j 20:53	8° II 27'16	0°-40'-54
minimum elong	-2046 May 31 j 06:49	20° 8 40'29	1°14'27	minimum elong	-2038 Jun 18 j 20:53	8° II 27'16	0°40'51
max. Earth dist.	-2046 May 31 j 01:11	20° 8 39'58	30.97491 AU	max. Earth dist.	-2038 Jun 18 j 07:58	8° II 26'05	31.04678 AU
retrograde	-2046 Sep 13 j 07:30	23° 8 11'12		retrograde	-2038 Sep 30 j 22:47	10° II 56'34	
opposition	-2046 Nov 29 j 19:07	21° 8 47'29	-1°-17'-34	opposition	-2038 Dec 17 j 04:37	9° II 33'24	0°-41'-19
min. Earth dist.	-2046 Nov 29 j 23:40	21° 8 47'10	28.98105 AU	min. Earth dist.	-2038 Dec 17 j 16:20	9° II 32'35	29.05114 AU
direct	-2045 Feb 16 j 15:55	20° 8 22'30		direct	-2037 Mar 06 j 17:42	8° II 08'09	
conjunction	-2045 Jun 02 j 20:44	22° 8 54'07	-1°-10'-36	conjunction	-2037 Jun 21 j 09:53	10° II 39'57	0°-36'-22
minimum elong	-2045 Jun 02 j 20:44	22° 8 54'07	1°10'35	minimum elong	-2037 Jun 21 j 09:54	10° II 39'57	0°36'22
max. Earth dist.	-2045 Jun 02 j 15:15	22° 8 53'36	30.98615 AU	max. Earth dist.	-2037 Jun 20 j 19:28	10° II 38'37	31.05538 AU
retrograde	-2045 Sep 15 j 18:13	25° 8 24'40		retrograde	-2037 Oct 03 j 10:01	13° II 09'05	
opposition	-2045 Dec 02 j 05:23	24° 8 01'04	-1°-13'-21	opposition	-2037 Dec 19 j 14:45	11° II 45'59	0°-36'-28
min. Earth dist.	-2045 Dec 02 j 11:11	24° 8 00'40	28.99207 AU	min. Earth dist.	-2037 Dec 20 j 02:54	11° II 45'08	29.06037 AU
direct	-2044 Feb 19 j 04:19	22° 8 36'06		direct	-2036 Mar 08 j 05:03	10° II 20'43	
conjunction	-2044 Jun 04 j 10:38	25° 8 07'45	-1°-6'-36	conjunction	-2036 Jun 22 j 23:10	12° II 52'32	0°-31'-48
minimum elong	-2044 Jun 04 j 10:39	25° 8 07'45	1°06'35	minimum elong	-2036 Jun 22 j 23:10	12° II 52'32	0°31'47
max. Earth dist.	-2044 Jun 04 j 02:52	25° 8 07'02	30.99699 AU	max. Earth dist.	-2036 Jun 22 j 09:19	12° II 51'16	31.06518 AU
retrograde	-2044 Sep 17 j 06:46	27° 8 38'09		retrograde	-2036 Oct 04 j 20:21	15° II 21'30	
opposition	-2044 Dec 03 j 15:29	26° 8 14'39	-1°-9'-2	opposition	-2036 Dec 21 j 00:49	13° II 58'30	0°-31'-33

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Attention, astronomical year style is used: The year -2036 in astronomical counting style is the year 2037 BCE in historical counting style.

min. Earth dist.	-2036 Dec 21 j 13:48	13° Π 57'35	29.07070 AU	min. Earth dist.	-2028 Jan 06 j 18:49	29° Π 25'24	29.14577 AU
direct	-2035 Mar 10 j 17:52	12° Π 33'14		direct	-2028 Mar 26 j 04:31	28° Π 01'25	
					-2028 Jun 26 j 03:53	0° Θ	
conjunction	-2035 Jun 25 j 12:14	15° Π 05'06	0°-27'-11	max. Earth dist.	-2028 Jul 10 j 09:17	0° Θ 31'26	31.14918 AU
minimum elong	-2035 Jun 25 j 12:14	15° Π 05'06	0°27'11				
max. Earth dist.	-2035 Jun 24 j 20:41	15° Π 03'40	31.07620 AU	conjunction	-2028 Jul 11 j 06:35	0° Θ 33'24	0°05'55
retrograde	-2035 Oct 07 j 08:46	17° Π 33'56		minimum elong	-2028 Jul 11 j 06:34	0° Θ 33'24	0°05'57
opposition	-2035 Dec 23 j 10:56	16° Π 11'02	0°-26'-36	behind sun begin	-2028 Jul 11 j 00:19	0° Θ 32'50	
min. Earth dist.	-2035 Dec 23 j 23:43	16° Π 10'08	29.08224 AU	behind sun end	-2028 Jul 11 j 12:49	0° Θ 33'57	
direct	-2034 Mar 13 j 05:12	14° Π 45'47		retrograde	-2028 Oct 22 j 09:03	3° Θ 01'16	
max. Earth dist.	-2034 Jun 27 j 10:09	17° Π 16'17	31.08810 AU	opposition	-2027 Jan 07 j 11:08	1° Θ 38'53	0°08'43
				min. Earth dist.	-2027 Jan 08 j 05:43	1° Θ 37'35	29.15279 AU
conjunction	-2034 Jun 28 j 01:18	17° Π 17'41	0°-22'-32	direct	-2027 Mar 28 j 15:58	0° Θ 13'36	
minimum elong	-2034 Jun 28 j 01:18	17° Π 17'41	0°22'30				
retrograde	-2034 Oct 09 j 17:37	19° Π 46'24		conjunction	-2027 Jul 13 j 19:13	2° Θ 45'33	0°10'37
opposition	-2034 Dec 25 j 21:13	18° Π 23'37	0°-21'-36	minimum elong	-2027 Jul 13 j 19:14	2° Θ 45'33	0°10'39
min. Earth dist.	-2034 Dec 26 j 11:31	18° Π 22'36	29.09440 AU	behind sun begin	-2027 Jul 13 j 14:12	2° Θ 45'06	
direct	-2033 Mar 15 j 16:04	16° Π 58'24		behind sun end	-2027 Jul 14 j 00:15	2° Θ 45'59	
				max. Earth dist.	-2027 Jul 12 j 22:23	2° Θ 43'37	31.15580 AU
conjunction	-2033 Jun 30 j 14:15	19° Π 30'21	0°-17'-51	retrograde	-2027 Oct 24 j 19:13	5° Θ 13'15	
minimum elong	-2033 Jun 30 j 14:15	19° Π 30'21	0°17'50	opposition	-2026 Jan 09 j 21:36	3° Θ 50'53	0°13'46
max. Earth dist.	-2033 Jun 29 j 21:45	19° Π 28'49	31.10047 AU	min. Earth dist.	-2026 Jan 10 j 17:11	3° Θ 49'31	29.15914 AU
retrograde	-2033 Oct 12 j 04:12	21° Π 58'56		direct	-2026 Mar 31 j 06:03	2° Θ 25'34	
opposition	-2033 Dec 28 j 07:17	20° Π 36'16	0°-16'-34	max. Earth dist.	-2026 Jul 15 j 08:58	4° Θ 55'23	31.16210 AU
min. Earth dist.	-2033 Dec 28 j 21:24	20° Π 35'16	29.10667 AU				
direct	-2032 Mar 17 j 04:06	19° Π 11'04		conjunction	-2026 Jul 16 j 07:23	4° Θ 57'27	0°15'18
max. Earth dist.	-2032 Jul 01 j 10:18	21° Π 41'30	31.11241 AU	minimum elong	-2026 Jul 16 j 07:23	4° Θ 57'27	0°15'21
				behind sun begin	-2026 Jul 16 j 05:40	4° Θ 57'18	
conjunction	-2032 Jul 02 j 03:19	21° Π 43'04	0°-13'-8	behind sun end	-2026 Jul 16 j 09:05	4° Θ 57'36	
minimum elong	-2032 Jul 02 j 03:18	21° Π 43'04	0°13'06	retrograde	-2026 Oct 27 j 06:49	7° Θ 24'59	
behind sun begin	-2032 Jul 01 j 23:29	21° Π 42'43		opposition	-2025 Jan 12 j 07:55	6° Θ 02'38	0°18'46
behind sun end	-2032 Jul 02 j 07:08	21° Π 43'24		min. Earth dist.	-2025 Jan 13 j 03:09	6° Θ 01'18	29.16555 AU
retrograde	-2032 Oct 13 j 14:08	24° Π 11'32		direct	-2025 Apr 02 j 18:41	4° Θ 37'16	
opposition	-2032 Dec 29 j 17:42	22° Π 48'57	0°-11'-31				
min. Earth dist.	-2032 Dec 30 j 09:37	22° Π 47'50	29.11826 AU	conjunction	-2025 Jul 18 j 19:38	7° Θ 09'07	0°19'58
direct	-2031 Mar 19 j 13:54	21° Π 23'47		minimum elong	-2025 Jul 18 j 19:38	7° Θ 09'07	0°20'00
				max. Earth dist.	-2025 Jul 17 j 21:50	7° Θ 07'06	31.16860 AU
conjunction	-2031 Jul 04 j 16:18	23° Π 55'47	0°-8'-25	retrograde	-2025 Oct 29 j 15:13	9° Θ 36'31	
minimum elong	-2031 Jul 04 j 16:18	23° Π 55'47	0°08'23	opposition	-2024 Jan 14 j 18:17	8° Θ 14'11	0°23'45
behind sun begin	-2031 Jul 04 j 10:33	23° Π 55'17		min. Earth dist.	-2024 Jan 15 j 14:47	8° Θ 12'45	29.17243 AU
behind sun end	-2031 Jul 04 j 22:03	23° Π 56'18		direct	-2024 Apr 04 j 06:31	6° Θ 48'47	
max. Earth dist.	-2031 Jul 03 j 22:20	23° Π 54'08	31.12348 AU	max. Earth dist.	-2024 Jul 19 j 08:56	9° Θ 18'30	31.17592 AU
retrograde	-2031 Oct 16 j 00:40	26° Π 24'07					
opposition	-2030 Jan 01 j 04:00	25° Π 01'38	0°-6'-27	conjunction	-2024 Jul 20 j 07:39	9° Θ 20'36	0°24'36
min. Earth dist.	-2030 Jan 01 j 19:56	25° Π 00'31	29.12866 AU	minimum elong	-2024 Jul 20 j 07:39	9° Θ 20'36	0°24'39
direct	-2030 Mar 22 j 02:42	23° Π 36'27		retrograde	-2024 Oct 31 j 01:24	11° Θ 47'51	
max. Earth dist.	-2030 Jul 06 j 09:49	26° Π 06'41	31.13322 AU	opposition	-2023 Jan 16 j 04:37	10° Θ 25'34	0°28'41
				min. Earth dist.	-2023 Jan 17 j 00:19	10° Θ 24'12	29.18021 AU
conjunction	-2030 Jul 07 j 05:13	26° Π 08'28	0°-3'-42	direct	-2023 Apr 06 j 18:45	9° Θ 00'10	
minimum elong	-2030 Jul 07 j 05:13	26° Π 08'28	0°03'39				
behind sun begin	-2030 Jul 06 j 22:42	26° Π 07'53		conjunction	-2023 Jul 22 j 19:38	11° Θ 31'58	0°29'12
behind sun end	-2030 Jul 07 j 11:43	26° Π 09'03		minimum elong	-2023 Jul 22 j 19:38	11° Θ 31'58	0°29'14
retrograde	-2030 Oct 18 j 11:27	28° Π 36'40		max. Earth dist.	-2023 Jul 21 j 21:09	11° Θ 29'53	31.18413 AU
opposition	-2029 Jan 03 j 14:30	27° Π 14'13	0°-1'-23	retrograde	-2023 Nov 02 j 10:44	13° Θ 59'07	
min. Earth dist.	-2029 Jan 04 j 07:50	27° Π 13'00	29.13788 AU	opposition	-2022 Jan 18 j 15:08	12° Θ 36'54	0°33'35
direct	-2029 Mar 24 j 14:27	25° Π 49'01		min. Earth dist.	-2022 Jan 19 j 11:53	12° Θ 35'27	29.18904 AU
asc. node	-2029 Apr 14 j 20:12	25° Π 56'19		direct	-2022 Apr 09 j 04:31	11° Θ 11'30	
				max. Earth dist.	-2022 Jul 24 j 08:54	13° Θ 41'12	31.19350 AU
conjunction	-2029 Jul 09 j 17:55	28° Π 21'01	0°01'09				
minimum elong	-2029 Jul 09 j 17:55	28° Π 21'01	0°01'11	conjunction	-2022 Jul 25 j 07:30	13° Θ 43'18	0°33'45
behind sun begin	-2029 Jul 09 j 11:22	28° Π 20'26		minimum elong	-2022 Jul 25 j 07:30	13° Θ 43'18	0°33'48
behind sun end	-2029 Jul 10 j 00:29	28° Π 21'36		retrograde	-2022 Nov 04 j 20:38	16° Θ 10'22	
max. Earth dist.	-2029 Jul 08 j 22:26	28° Π 19'13	31.14180 AU	opposition	-2021 Jan 21 j 01:36	14° Θ 48'14	0°38'25
	-2029 Aug 27 j 04:00	0° Θ		min. Earth dist.	-2021 Jan 21 j 21:42	14° Θ 46'50	29.19873 AU
retrograde	-2029 Oct 20 j 21:51	0° Θ 49'03		direct	-2021 Apr 11 j 16:46	13° Θ 22'53	
	-2029 Dec 16 j 13:27	30° $\mathbb{R}\Pi$					
opposition	-2028 Jan 06 j 00:54	29° Π 26'39	0°03'40	conjunction	-2021 Jul 27 j 19:10	15° Θ 54'41	0°38'16

Attention, astronomical year style is used: The year -2021 in astronomical counting style is the year 2022 BCE in historical counting style.

minimum elong	-2021 Jul 27 j 19:09	15° $\mathring{54}'41''$	0°38'18	minimum elong	-2013 Aug 14 j 14:48	3° $\mathring{26}'02''$	1°11'46
max. Earth dist.	-2021 Jul 26 j 19:55	15° $\mathring{52}'32''$	31.20339 AU	max. Earth dist.	-2013 Aug 13 j 13:28	3° $\mathring{23}'41''$	31.25535 AU
retrograde	-2021 Nov 07 j 07:09	18° $\mathring{21}'43''$		retrograde	-2013 Nov 24 j 16:07	5° $\mathring{52}'27''$	
opposition	-2020 Jan 23 j 12:09	16° $\mathring{59}'39''$	0°43'13	opposition	-2012 Feb 10 j 02:24	4° $\mathring{30}'38''$	1°18'37
min. Earth dist.	-2020 Jan 24 j 09:09	16° $\mathring{58}'11''$	29.20881 AU	min. Earth dist.	-2012 Feb 11 j 01:35	4° $\mathring{29}'02''$	29.25805 AU
direct	-2020 Apr 13 j 03:17	15° $\mathring{34}'21''$		direct	-2012 May 01 j 06:11	3° $\mathring{05}'22''$	
max. Earth dist.	-2020 Jul 28 j 08:07	18° $\mathring{04}'03''$	31.21331 AU	max. Earth dist.	-2012 Aug 14 j 23:59	5° $\mathring{34}'27''$	31.25935 AU
conjunction	-2020 Jul 29 j 06:59	18° $\mathring{06}'10''$	0°42'43	conjunction	-2012 Aug 16 j 01:40	5° $\mathring{36}'51''$	1°15'30
minimum elong	-2020 Jul 29 j 06:59	18° $\mathring{06}'10''$	0°42'46	minimum elong	-2012 Aug 16 j 01:39	5° $\mathring{36}'51''$	1°15'32
retrograde	-2020 Nov 08 j 17:16	20° $\mathring{33}'08''$		retrograde	-2012 Nov 26 j 01:29	8° $\mathring{03}'12''$	
opposition	-2019 Jan 24 j 22:42	19° $\mathring{11}'09''$	0°47'56	opposition	-2011 Feb 11 j 13:17	6° $\mathring{41}'21''$	1°22'35
min. Earth dist.	-2019 Jan 25 j 20:02	19° $\mathring{09}'40''$	29.21842 AU	min. Earth dist.	-2011 Feb 12 j 12:47	6° $\mathring{39}'44''$	29.26262 AU
direct	-2019 Apr 15 j 16:06	17° $\mathring{45}'54''$		direct	-2011 May 03 j 16:20	5° $\mathring{16}'06''$	
conjunction	-2019 Jul 31 j 18:41	20° $\mathring{17}'44''$	0°47'07	max. Earth dist.	-2011 Aug 17 j 11:54	7° $\mathring{45}'13''$	31.26436 AU
minimum elong	-2019 Jul 31 j 18:41	20° $\mathring{17}'44''$	0°47'09	conjunction	-2011 Aug 18 j 12:29	7° $\mathring{47}'31''$	1°19'10
max. Earth dist.	-2019 Jul 30 j 18:26	20° $\mathring{15}'29''$	31.22252 AU	minimum elong	-2011 Aug 18 j 12:29	7° $\mathring{47}'31''$	1°19'11
retrograde	-2019 Nov 11 j 04:53	22° $\mathring{44}'38''$		retrograde	-2011 Nov 28 j 10:37	10° $\mathring{13}'49''$	
opposition	-2018 Jan 27 j 09:27	21° $\mathring{22}'43''$	0°52'35	opposition	-2010 Feb 14 j 00:19	8° $\mathring{51}'59''$	1°26'26
min. Earth dist.	-2018 Jan 28 j 07:04	21° $\mathring{21}'14''$	29.22729 AU	min. Earth dist.	-2010 Feb 14 j 23:24	8° $\mathring{50}'23''$	29.26812 AU
direct	-2018 Apr 18 j 02:48	19° $\mathring{57}'31''$		direct	-2010 May 06 j 04:11	7° $\mathring{26}'45''$	
max. Earth dist.	-2018 Aug 02 j 06:44	22° $\mathring{27}'08''$	31.23069 AU	conjunction	-2010 Aug 20 j 22:58	9° $\mathring{58}'05''$	1°22'42
conjunction	-2018 Aug 03 j 06:18	22° $\mathring{29}'20''$	0°51'26	minimum elong	-2010 Aug 20 j 22:57	9° $\mathring{58}'05''$	1°22'44
minimum elong	-2018 Aug 03 j 06:18	22° $\mathring{29}'20''$	0°51'28	max. Earth dist.	-2010 Aug 19 j 21:49	9° $\mathring{55}'45''$	31.27042 AU
retrograde	-2018 Nov 13 j 15:23	24° $\mathring{56}'11''$		retrograde	-2010 Nov 30 j 21:52	12° $\mathring{24}'23''$	
opposition	-2017 Jan 29 j 20:19	23° $\mathring{34}'19''$	0°57'10	opposition	-2009 Feb 16 j 11:18	11° $\mathring{02}'34''$	1°30'09
min. Earth dist.	-2017 Jan 30 j 18:53	23° $\mathring{32}'45''$	29.23485 AU	min. Earth dist.	-2009 Feb 17 j 09:51	11° $\mathring{01}'01''$	29.27480 AU
direct	-2017 Apr 20 j 16:49	22° $\mathring{09}'08''$		direct	-2009 May 08 j 14:35	9° $\mathring{37}'22''$	
conjunction	-2017 Aug 05 j 17:48	24° $\mathring{40}'55''$	0°55'40	max. Earth dist.	-2009 Aug 22 j 09:54	12° $\mathring{06}'28''$	31.27741 AU
minimum elong	-2017 Aug 05 j 17:48	24° $\mathring{40}'55''$	0°55'42	conjunction	-2009 Aug 23 j 09:40	12° $\mathring{08}'41''$	1°26'07
max. Earth dist.	-2017 Aug 04 j 16:38	24° $\mathring{38}'35''$	31.23761 AU	minimum elong	-2009 Aug 23 j 09:39	12° $\mathring{08}'41''$	1°26'09
retrograde	-2017 Nov 16 j 03:23	27° $\mathring{07}'41''$		retrograde	-2009 Dec 03 j 07:58	14° $\mathring{34}'57''$	
opposition	-2016 Feb 01 j 06:56	25° $\mathring{45}'51''$	1°01'39	opposition	-2008 Feb 18 j 22:16	13° $\mathring{13}'10''$	1°33'44
min. Earth dist.	-2016 Feb 02 j 05:13	25° $\mathring{44}'19''$	29.24120 AU	min. Earth dist.	-2008 Feb 19 j 21:16	13° $\mathring{11}'36''$	29.28201 AU
direct	-2016 Apr 22 j 05:33	24° $\mathring{20}'40''$		direct	-2008 May 10 j 03:40	11° $\mathring{48}'03''$	
max. Earth dist.	-2016 Aug 06 j 04:40	26° $\mathring{50}'08''$	31.24322 AU	conjunction	-2008 Aug 24 j 20:10	14° $\mathring{19}'19''$	1°29'25
conjunction	-2016 Aug 07 j 05:25	26° $\mathring{52}'26''$	0°59'50	minimum elong	-2008 Aug 24 j 20:10	14° $\mathring{19}'19''$	1°29'27
minimum elong	-2016 Aug 07 j 05:25	26° $\mathring{52}'26''$	0°59'52	max. Earth dist.	-2008 Aug 23 j 19:30	14° $\mathring{17}'01''$	31.28475 AU
retrograde	-2016 Nov 17 j 12:04	29° $\mathring{19}'07''$		retrograde	-2008 Sep 12 j 05:12	15° $\mathring{00}'00''$	
opposition	-2015 Feb 02 j 17:53	27° $\mathring{57}'19''$	1°06'03	opposition	-2008 Dec 04 j 19:57	16° $\mathring{45}'35''$	
min. Earth dist.	-2015 Feb 03 j 17:33	27° $\mathring{55}'40''$	29.24626 AU	opposition	-2007 Feb 20 j 09:22	15° $\mathring{23}'51''$	1°37'12
direct	-2015 Apr 24 j 17:50	26° $\mathring{32}'07''$		min. Earth dist.	-2007 Feb 21 j 07:29	15° $\mathring{22}'20''$	29.28937 AU
conjunction	-2015 Aug 09 j 16:40	29° $\mathring{03}'49''$	1°03'54	direct	-2007 Mar 07 j 02:07	15° $\mathring{48}'00''$	
minimum elong	-2015 Aug 09 j 16:39	29° $\mathring{03}'49''$	1°03'56	direct	-2007 May 12 j 15:35	13° $\mathring{58}'47''$	
max. Earth dist.	-2015 Aug 08 j 14:59	29° $\mathring{01}'26''$	31.24779 AU	max. Earth dist.	-2007 Jul 15 j 04:21	15° $\mathring{00}'00''$	
retrograde	-2015 Sep 04 j 10:24	0° $\mathring{00}'00''$		conjunction	-2007 Aug 26 j 07:02	16° $\mathring{27}'50''$	31.29178 AU
opposition	-2015 Nov 19 j 22:10	1° $\mathring{30}'25''$		minimum elong	-2007 Aug 27 j 06:43	16° $\mathring{30}'02''$	1°32'36
min. Earth dist.	-2014 Feb 05 j 04:40	0° $\mathring{08}'36''$	1°10'21	retrograde	-2007 Aug 27 j 06:43	16° $\mathring{30}'02''$	1°32'37
direct	-2014 Feb 06 j 03:38	0° $\mathring{07}'01''$	29.25042 AU	opposition	-2007 Dec 07 j 05:24	18° $\mathring{56}'19''$	
max. Earth dist.	-2014 Feb 10 j 09:34	30° $\mathring{48}'00''$		opposition	-2006 Feb 22 j 20:48	17° $\mathring{34}'37''$	1°40'31
conjunction	-2014 Apr 27 j 06:45	28° $\mathring{43}'24''$		min. Earth dist.	-2006 Feb 23 j 19:55	17° $\mathring{33}'02''$	29.29615 AU
minimum elong	-2014 Jul 08 j 00:35	0° $\mathring{00}'00''$		direct	-2006 May 15 j 03:31	16° $\mathring{09}'37''$	
max. Earth dist.	-2014 Aug 11 j 02:25	1° $\mathring{12}'40''$	31.25158 AU	conjunction	-2006 Aug 29 j 17:09	18° $\mathring{40}'49''$	1°35'38
conjunction	-2014 Aug 12 j 03:54	1° $\mathring{15}'02''$	1°07'52	minimum elong	-2006 Aug 29 j 17:08	18° $\mathring{40}'49''$	1°35'40
minimum elong	-2014 Aug 12 j 03:53	1° $\mathring{15}'02''$	1°07'55	max. Earth dist.	-2006 Aug 28 j 16:56	18° $\mathring{38}'33''$	31.29814 AU
retrograde	-2014 Nov 22 j 07:34	3° $\mathring{41}'32''$		retrograde	-2006 Dec 09 j 16:21	21° $\mathring{07}'05''$	
opposition	-2013 Feb 07 j 15:35	2° $\mathring{19}'43''$	1°14'32	opposition	-2005 Feb 25 j 08:02	19° $\mathring{45}'26''$	1°43'41
min. Earth dist.	-2013 Feb 08 j 15:36	2° $\mathring{18}'04''$	29.25422 AU	min. Earth dist.	-2005 Feb 26 j 06:13	19° $\mathring{43}'55''$	29.30201 AU
direct	-2013 Apr 29 j 17:10	0° $\mathring{54}'29''$		direct	-2005 May 17 j 16:28	18° $\mathring{20}'28''$	
conjunction	-2013 Aug 14 j 14:48	3° $\mathring{26}'02''$	1°11'44	max. Earth dist.	-2005 Aug 31 j 03:35	20° $\mathring{49}'23''$	31.30326 AU

Attention, astronomical year style is used: The year -2005 in astronomical counting style is the year 2006 BCE in historical counting style.

conjunction	-2005 Sep 01 j 03:35	20°051'38	1°38'32	minimum elong	-1997 Sep 18 j 11:34	8°00'15.59	1°56'21
minimum elong	-2005 Sep 01 j 03:35	20°051'38	1°38'33	max. Earth dist.	-1997 Sep 17 j 14:29	8°00'14'01	31.31730 AU
retrograde	-2005 Dec 12 j 02:26	23°017'55		retrograde	-1997 Dec 29 j 12:02	10°00'42'25	
opposition	-2004 Feb 27 j 19:34	21°056'16	1°46'42	opposition	-1996 Mar 16 j 16:30	9°00'20'38	2°05'05
min. Earth dist.	-2004 Feb 28 j 18:44	21°054'41	29.30658 AU	min. Earth dist.	-1996 Mar 17 j 11:49	9°00'19'19	29.32022 AU
direct	-2004 May 19 j 03:30	20°031'21		direct	-1996 Jun 06 j 02:34	7°00'55'59	
conjunction	-2004 Sep 02 j 13:59	23°002'26	1°41'17	conjunction	-1996 Sep 19 j 21:14	10°00'26'28	1°57'51
minimum elong	-2004 Sep 02 j 13:59	23°002'26	1°41'19	minimum elong	-1996 Sep 19 j 21:14	10°00'26'28	1°57'52
max. Earth dist.	-2004 Sep 01 j 14:07	23°000'12	31.30709 AU	max. Earth dist.	-1996 Sep 19 j 00:54	10°00'24'34	31.32031 AU
retrograde	-2004 Dec 13 j 11:23	25°028'43		retrograde	-1996 Dec 30 j 22:51	12°00'52'59	
opposition	-2003 Mar 01 j 07:00	24°007'05	1°49'35	opposition	-1995 Mar 19 j 04:27	11°00'31'13	2°06'36
min. Earth dist.	-2003 Mar 02 j 05:26	24°005'32	29.30965 AU	min. Earth dist.	-1995 Mar 20 j 00:10	11°00'29'53	29.32337 AU
direct	-2003 May 21 j 16:32	22°042'11		direct	-1995 Jun 08 j 13:52	10°00'06'39	
max. Earth dist.	-2003 Sep 03 j 23:53	25°010'55	31.30948 AU	max. Earth dist.	-1995 Sep 21 j 11:25	12°00'35'15	31.32340 AU
conjunction	-2003 Sep 05 j 00:18	25°013'12	1°43'54	conjunction	-1995 Sep 22 j 06:54	12°00'37'05	1°59'11
minimum elong	-2003 Sep 05 j 00:17	25°013'12	1°43'55	minimum elong	-1995 Sep 22 j 06:54	12°00'37'05	1°59'11
retrograde	-2003 Dec 15 j 21:17	27°039'29		retrograde	-1994 Jan 02 j 07:51	15°00'03'40	
opposition	-2002 Mar 03 j 18:39	26°017'50	1°52'18	opposition	-1994 Mar 21 j 16:27	13°00'41'55	2°07'56
min. Earth dist.	-2002 Mar 04 j 17:26	26°016'16	29.31159 AU	min. Earth dist.	-1994 Mar 22 j 10:58	13°00'40'40	29.32616 AU
direct	-2002 May 24 j 02:41	24°052'58		direct	-1994 Jun 11 j 02:31	12°00'17'26	
max. Earth dist.	-2002 Sep 06 j 11:04	27°021'42	31.31085 AU	conjunction	-1994 Sep 24 j 16:24	14°00'47'48	2°00'20
conjunction	-2002 Sep 07 j 10:25	27°023'53	1°46'22	minimum elong	-1994 Sep 24 j 16:24	14°00'47'48	2°00'21
minimum elong	-2002 Sep 07 j 10:25	27°023'53	1°46'23	max. Earth dist.	-1994 Sep 23 j 20:43	14°00'45'57	31.32580 AU
retrograde	-2002 Dec 18 j 06:15	29°050'10		retrograde	-1993 Jan 04 j 18:00	17°00'14'29	
opposition	-2001 Mar 06 j 06:14	28°028'29	1°54'51	opposition	-1993 Mar 24 j 04:32	15°00'52'44	2°09'05
min. Earth dist.	-2001 Mar 07 j 04:50	28°026'56	29.31248 AU	min. Earth dist.	-1993 Mar 24 j 23:08	15°00'51'28	29.32820 AU
direct	-2001 May 26 j 14:35	27°003'37		direct	-1993 Jun 13 j 12:42	14°00'28'19	
conjunction	-2001 Sep 09 j 20:25	29°034'27	1°48'41	max. Earth dist.	-1993 Sep 26 j 07:39	16°00'56'53	31.32718 AU
minimum elong	-2001 Sep 09 j 20:24	29°034'27	1°48'42	conjunction	-1993 Sep 27 j 02:08	16°00'58'37	2°01'20
max. Earth dist.	-2001 Sep 08 j 20:23	29°032'12	31.31145 AU	minimum elong	-1993 Sep 27 j 02:08	16°00'58'37	2°01'20
retrograde	-2001 Sep 21 j 06:33	0°00'00		retrograde	-1992 Jan 07 j 03:15	19°00'25'22	
opposition	-2001 Dec 20 j 17:21	2°00'00'45		opposition	-1992 Mar 25 j 16:36	18°00'03'36	2°10'03
opposition	-2000 Mar 07 j 17:39	0°00'39'01	1°57'14	min. Earth dist.	-1992 Mar 26 j 10:56	18°00'02'21	29.32883 AU
min. Earth dist.	-2000 Mar 08 j 15:41	0°00'37'31	29.31303 AU	direct	-1992 Jun 15 j 00:35	16°00'39'15	
direct	-2000 Apr 01 j 12:01	30°00'00		conjunction	-1992 Sep 28 j 11:45	19°00'09'27	2°02'09
max. Earth dist.	-2000 May 28 j 01:10	29°014'10		minimum elong	-1992 Sep 28 j 11:45	19°00'09'27	2°02'09
conjunction	-2000 Jul 21 j 12:30	0°00'00		max. Earth dist.	-1992 Sep 27 j 16:35	19°00'07'39	31.32712 AU
retrograde	-2000 Sep 10 j 08:01	1°00'42'48	31.31191 AU	retrograde	-1991 Jan 08 j 14:41	21°00'36'17	
conjunction	-2000 Sep 11 j 06:27	1°00'44'54	1°50'50	opposition	-1991 Mar 28 j 04:51	20°00'14'29	2°10'50
minimum elong	-2000 Sep 11 j 06:27	1°00'44'54	1°50'51	min. Earth dist.	-1991 Mar 28 j 22:33	20°00'13'17	29.32809 AU
retrograde	-2000 Dec 22 j 03:19	4°00'11'12		direct	-1991 Jun 17 j 11:17	18°00'50'10	
opposition	-1999 Mar 10 j 05:24	2°00'49'26	1°59'27	conjunction	-1991 Sep 30 j 21:20	21°00'20'17	2°02'48
min. Earth dist.	-1999 Mar 11 j 03:30	2°00'47'56	29.31366 AU	minimum elong	-1991 Sep 30 j 21:20	21°00'20'17	2°02'48
direct	-1999 May 30 j 14:08	1°00'24'37		max. Earth dist.	-1991 Sep 30 j 03:36	21°00'18'37	31.32552 AU
conjunction	-1999 Sep 13 j 16:06	3°00'55'16	1°52'50	retrograde	-1990 Jan 11 j 00:28	23°00'47'10	
minimum elong	-1999 Sep 13 j 16:05	3°00'55'16	1°52'51	opposition	-1990 Mar 30 j 17:16	22°00'25'19	2°11'26
max. Earth dist.	-1999 Sep 12 j 17:20	3°00'53'08	31.31285 AU	min. Earth dist.	-1990 Mar 31 j 11:12	22°00'24'06	29.32571 AU
retrograde	-1999 Dec 24 j 15:06	6°00'21'36		direct	-1990 Jun 19 j 23:21	21°00'01'01	
opposition	-1998 Mar 12 j 17:04	4°00'59'48	2°01'30	conjunction	-1990 Oct 03 j 06:49	23°00'31'01	2°03'16
min. Earth dist.	-1998 Mar 13 j 13:35	4°00'58'24	29.31505 AU	minimum elong	-1990 Oct 03 j 06:49	23°00'31'01	2°03'16
direct	-1998 Jun 02 j 01:36	3°00'35'01		max. Earth dist.	-1990 Oct 02 j 12:33	23°00'29'18	31.32253 AU
max. Earth dist.	-1998 Sep 15 j 04:38	6°00'03'37	31.31459 AU	retrograde	-1989 Jan 13 j 12:13	25°00'57'58	
conjunction	-1998 Sep 16 j 01:56	6°00'05'36	1°54'40	opposition	-1989 Apr 02 j 05:23	24°00'36'02	2°11'51
minimum elong	-1998 Sep 16 j 01:56	6°00'05'36	1°54'41	min. Earth dist.	-1989 Apr 02 j 22:00	24°00'34'55	29.32209 AU
retrograde	-1998 Dec 27 j 00:41	8°00'31'59		direct	-1989 Jun 22 j 10:15	23°00'11'45	
opposition	-1997 Mar 15 j 04:48	7°00'10'11	2°03'23	conjunction	-1989 Oct 05 j 16:18	25°00'41'38	2°03'34
min. Earth dist.	-1997 Mar 16 j 01:43	7°00'08'46	29.31731 AU	minimum elong	-1989 Oct 05 j 16:18	25°00'41'38	2°03'34
direct	-1997 Jun 04 j 13:15	5°00'45'28		max. Earth dist.	-1989 Oct 04 j 23:11	25°00'40'01	31.31832 AU
conjunction	-1997 Sep 18 j 11:34	8°00'15'59	1°56'20	retrograde	-1988 Jan 15 j 22:17	28°00'08'38	

Attention, astronomical year style is used: The year -1988 in astronomical counting style is the year 1989 BCE in historical counting style.

opposition	-1988 Apr 03 j 17:47	26° $\overline{14}$ 46'37	2°12'04	max. Earth dist.	-1981 Oct 22 j 06:46	13° $\overline{04}$ 04'06	31.29252 AU
min. Earth dist.	-1988 Apr 04 j 10:54	26° $\overline{14}$ 45'27	29.31749 AU	retrograde	-1980 Feb 02 j 12:14	15° $\overline{03}$ 33'02	
direct	-1988 Jun 23 j 22:27	25° $\overline{14}$ 22'20		opposition	-1980 Apr 21 j 21:38	14° $\overline{01}$ 10'43	2°07'06
max. Earth dist.	-1988 Oct 06 j 08:51	27° $\overline{15}$ 50'31	31.31357 AU	min. Earth dist.	-1980 Apr 22 j 06:51	14° $\overline{01}$ 10'05	29.29213 AU
				direct	-1980 Jul 11 j 17:48	12° $\overline{04}$ 46'54	
conjunction	-1988 Oct 07 j 01:30	27° $\overline{15}$ 52'05	2°03'41				
minimum elong	-1988 Oct 07 j 01:30	27° $\overline{15}$ 52'05	2°03'41	conjunction	-1980 Oct 24 j 02:36	15° $\overline{01}$ 16'04	1°58'18
	-1988 Dec 14 j 14:15	0° $\overline{01}$		minimum elong	-1980 Oct 24 j 02:36	15° $\overline{01}$ 16'04	1°58'18
retrograde	-1987 Jan 17 j 09:44	0° $\overline{01}$ 19'08		max. Earth dist.	-1980 Oct 23 j 17:08	15° $\overline{01}$ 15'11	31.28874 AU
	-1987 Feb 21 j 02:59	30° $\overline{08}$		retrograde	-1979 Feb 03 j 23:20	17° $\overline{04}$ 44'09	
opposition	-1987 Apr 06 j 06:05	28° $\overline{15}$ 57'02	2°12'07	opposition	-1979 Apr 24 j 10:36	16° $\overline{02}$ 21'47	2°05'38
min. Earth dist.	-1987 Apr 06 j 21:25	28° $\overline{15}$ 56'00	29.31264 AU	min. Earth dist.	-1979 Apr 24 j 20:13	16° $\overline{02}$ 21'08	29.28775 AU
direct	-1987 Jun 26 j 12:00	27° $\overline{15}$ 32'45		direct	-1979 Jul 14 j 05:30	14° $\overline{04}$ 58'03	
	-1987 Oct 08 j 09:15	0° $\overline{01}$					
conjunction	-1987 Oct 09 j 10:44	0° $\overline{01}$ 02'24	2°03'38	conjunction	-1979 Oct 26 j 11:50	17° $\overline{02}$ 27'08	1°56'51
minimum elong	-1987 Oct 09 j 10:43	0° $\overline{01}$ 02'24	2°03'38	minimum elong	-1979 Oct 26 j 11:51	17° $\overline{02}$ 27'08	1°56'51
max. Earth dist.	-1987 Oct 08 j 18:57	0° $\overline{01}$ 00'55	31.30882 AU	max. Earth dist.	-1979 Oct 26 j 02:50	17° $\overline{02}$ 26'17	31.28381 AU
retrograde	-1986 Jan 19 j 20:37	2° $\overline{01}$ 29'31		retrograde	-1978 Feb 06 j 12:06	19° $\overline{04}$ 55'20	
opposition	-1986 Apr 08 j 18:33	1° $\overline{01}$ 07'21	2°11'58	opposition	-1978 Apr 26 j 23:21	18° $\overline{03}$ 32'55	2°03'59
min. Earth dist.	-1986 Apr 09 j 09:51	1° $\overline{01}$ 06'18	29.30828 AU	min. Earth dist.	-1978 Apr 27 j 07:21	18° $\overline{03}$ 32'23	29.28206 AU
	-1986 May 26 j 18:54	30° $\overline{08}$		direct	-1978 Jul 16 j 18:30	17° $\overline{04}$ 09'13	
direct	-1986 Jun 28 j 23:28	29° $\overline{15}$ 43'05		conjunction	-1978 Oct 28 j 21:02	19° $\overline{03}$ 38'14	1°55'14
	-1986 Jul 31 j 08:29	0° $\overline{01}$		minimum elong	-1978 Oct 28 j 21:02	19° $\overline{03}$ 38'14	1°55'13
				max. Earth dist.	-1978 Oct 28 j 12:25	19° $\overline{03}$ 37'25	31.27742 AU
conjunction	-1986 Oct 11 j 19:50	2° $\overline{01}$ 12'38	2°03'24	retrograde	-1977 Feb 08 j 23:59	22° $\overline{06}$ 06'34	
minimum elong	-1986 Oct 11 j 19:50	2° $\overline{01}$ 12'38	2°03'24	opposition	-1977 Apr 29 j 12:17	20° $\overline{04}$ 44'04	2°02'10
max. Earth dist.	-1986 Oct 11 j 05:29	2° $\overline{01}$ 11'16	31.30486 AU	min. Earth dist.	-1977 Apr 29 j 20:35	20° $\overline{04}$ 43'30	29.27502 AU
retrograde	-1985 Jan 22 j 05:47	4° $\overline{01}$ 39'50		direct	-1977 Jul 19 j 05:46	19° $\overline{04}$ 20'23	
opposition	-1985 Apr 11 j 06:53	3° $\overline{01}$ 17'37	2°11'37				
min. Earth dist.	-1985 Apr 11 j 20:25	3° $\overline{01}$ 16'42	29.30462 AU	conjunction	-1977 Oct 31 j 06:15	21° $\overline{04}$ 49'18	1°53'27
direct	-1985 Jul 01 j 12:23	1° $\overline{01}$ 53'24		minimum elong	-1977 Oct 31 j 06:15	21° $\overline{04}$ 49'18	1°53'26
				max. Earth dist.	-1977 Oct 30 j 22:51	21° $\overline{04}$ 48'36	31.26986 AU
conjunction	-1985 Oct 14 j 04:55	4° $\overline{01}$ 22'52	2°03'00	retrograde	-1976 Feb 11 j 09:35	24° $\overline{01}$ 17'43	
minimum elong	-1985 Oct 14 j 04:55	4° $\overline{01}$ 22'52	2°02'59	opposition	-1976 May 01 j 01:00	22° $\overline{05}$ 55'08	2°00'11
max. Earth dist.	-1985 Oct 13 j 14:44	4° $\overline{01}$ 21'31	31.30165 AU	min. Earth dist.	-1976 May 01 j 07:49	22° $\overline{05}$ 54'40	29.26683 AU
retrograde	-1984 Jan 24 j 16:18	6° $\overline{01}$ 50'11		direct	-1976 Jul 20 j 19:11	21° $\overline{04}$ 31'28	
opposition	-1984 Apr 12 j 19:14	5° $\overline{01}$ 27'56	2°11'06				
min. Earth dist.	-1984 Apr 13 j 08:11	5° $\overline{01}$ 27'03	29.30188 AU	conjunction	-1976 Nov 01 j 15:17	24° $\overline{06}$ 00'16	1°51'31
direct	-1984 Jul 02 j 22:53	4° $\overline{01}$ 03'47		minimum elong	-1976 Nov 01 j 15:18	24° $\overline{06}$ 00'16	1°51'30
				max. Earth dist.	-1976 Nov 01 j 07:52	23° $\overline{05}$ 59'34	31.26146 AU
conjunction	-1984 Oct 15 j 14:07	6° $\overline{01}$ 33'11	2°02'24	retrograde	-1975 Feb 12 j 20:55	26° $\overline{06}$ 28'47	
minimum elong	-1984 Oct 15 j 14:07	6° $\overline{01}$ 33'11	2°02'24	opposition	-1975 May 03 j 13:56	25° $\overline{06}$ 06'06	1°58'02
max. Earth dist.	-1984 Oct 15 j 01:54	6° $\overline{01}$ 32'02	31.29929 AU	min. Earth dist.	-1975 May 03 j 20:13	25° $\overline{06}$ 05'40	29.25834 AU
retrograde	-1983 Jan 26 j 01:53	9° $\overline{01}$ 00'39		direct	-1975 Jul 23 j 06:57	23° $\overline{06}$ 42'26	
opposition	-1983 Apr 15 j 07:48	7° $\overline{01}$ 38'22	2°10'23				
min. Earth dist.	-1983 Apr 15 j 19:48	7° $\overline{01}$ 37'34	29.29964 AU	conjunction	-1975 Nov 04 j 00:19	26° $\overline{06}$ 11'07	1°49'25
direct	-1983 Jul 05 j 10:50	6° $\overline{01}$ 14'19		minimum elong	-1975 Nov 04 j 00:19	26° $\overline{06}$ 11'07	1°49'23
				max. Earth dist.	-1975 Nov 03 j 18:59	26° $\overline{06}$ 10'36	31.25301 AU
conjunction	-1983 Oct 17 j 23:02	8° $\overline{01}$ 43'39	2°01'39	retrograde	-1974 Feb 15 j 06:34	28° $\overline{06}$ 39'45	
minimum elong	-1983 Oct 17 j 23:02	8° $\overline{01}$ 43'39	2°01'38	opposition	-1974 May 06 j 02:49	27° $\overline{06}$ 16'57	1°55'43
max. Earth dist.	-1983 Oct 17 j 10:47	8° $\overline{01}$ 42'29	31.29729 AU	min. Earth dist.	-1974 May 06 j 08:00	27° $\overline{06}$ 16'36	29.24999 AU
retrograde	-1982 Jan 28 j 13:38	11° $\overline{01}$ 11'16		direct	-1974 Jul 25 j 19:58	25° $\overline{06}$ 53'18	
opposition	-1982 Apr 17 j 20:24	9° $\overline{01}$ 48'59	2°09'28				
min. Earth dist.	-1982 Apr 18 j 07:14	9° $\overline{01}$ 48'15	29.29769 AU	conjunction	-1974 Nov 06 j 09:16	28° $\overline{06}$ 21'51	1°47'10
direct	-1982 Jul 07 j 20:56	8° $\overline{01}$ 25'01		minimum elong	-1974 Nov 06 j 09:16	28° $\overline{06}$ 21'51	1°47'08
				max. Earth dist.	-1974 Nov 06 j 04:03	28° $\overline{06}$ 21'22	31.24509 AU
conjunction	-1982 Oct 20 j 08:17	10° $\overline{01}$ 54'18	2°00'42		-1974 Dec 23 j 13:10	0° $\overline{01}$	
minimum elong	-1982 Oct 20 j 08:17	10° $\overline{01}$ 54'18	2°00'42	retrograde	-1973 Feb 17 j 17:32	0° $\overline{01}$ 50'37	
max. Earth dist.	-1982 Oct 19 j 21:51	10° $\overline{01}$ 53'19	31.29517 AU		-1973 Apr 18 j 04:17	30° $\overline{08}$	
retrograde	-1981 Jan 30 j 23:50	13° $\overline{01}$ 22'04		opposition	-1973 May 08 j 15:28	29° $\overline{06}$ 27'44	1°53'13
opposition	-1981 Apr 20 j 08:58	11° $\overline{01}$ 59'46	2°08'22	min. Earth dist.	-1973 May 08 j 19:13	29° $\overline{06}$ 27'28	29.24254 AU
min. Earth dist.	-1981 Apr 20 j 19:46	11° $\overline{01}$ 59'02	29.29529 AU	direct	-1973 Jul 28 j 06:19	28° $\overline{06}$ 04'06	
direct	-1981 Jul 10 j 07:53	10° $\overline{01}$ 35'53			-1973 Oct 25 j 07:25	0° $\overline{01}$	
conjunction	-1981 Oct 22 j 17:24	13° $\overline{01}$ 05'07	1°59'36	conjunction	-1973 Nov 08 j 18:23	0° $\overline{01}$ 32'34	1°44'45
minimum elong	-1981 Oct 22 j 17:24	13° $\overline{01}$ 05'07	1°59'35	minimum elong	-1973 Nov 08 j 18:23	0° $\overline{01}$ 32'34	1°44'44

Attention, astronomical year style is used: The year -1973 in astronomical counting style is the year 1974 BCE in historical counting style.

max. Earth dist.	-1973 Nov 08 j 15:14	0° \mathbb{M} 32'17	31.23811 AU	max. Earth dist.	-1965 Nov 25 j 23:00	18° \mathbb{M} 02'45	31.18933 AU
retrograde	-1972 Feb 20 j 03:00	3° \mathbb{M} 01'28		retrograde	-1964 Mar 09 j 03:26	20° \mathbb{M} 32'42	
opposition	-1972 May 10 j 04:25	1° \mathbb{M} 38'30	1°50'34	opposition	-1964 May 28 j 13:06	19° \mathbb{M} 09'22	1°23'48
min. Earth dist.	-1972 May 10 j 07:34	1° \mathbb{M} 38'18	29.23602 AU	min. Earth dist.	-1964 May 28 j 08:53	19° \mathbb{M} 09'39	29.18493 AU
direct	-1972 Jul 29 j 17:32	0° \mathbb{M} 14'56		direct	-1964 Aug 16 j 12:23	17° \mathbb{M} 46'14	
conjunction	-1972 Nov 10 j 03:14	2° \mathbb{M} 43'19	1°42'11	conjunction	-1964 Nov 27 j 05:34	20° \mathbb{M} 14'11	1°16'37
minimum elong	-1972 Nov 10 j 03:15	2° \mathbb{M} 43'19	1°42'10	minimum elong	-1964 Nov 27 j 05:35	20° \mathbb{M} 14'11	1°16'35
max. Earth dist.	-1972 Nov 10 j 00:33	2° \mathbb{M} 43'04	31.23224 AU	max. Earth dist.	-1964 Nov 27 j 10:06	20° \mathbb{M} 14'37	31.17915 AU
retrograde	-1971 Feb 21 j 15:21	5° \mathbb{M} 12'22		retrograde	-1963 Mar 11 j 13:17	22° \mathbb{M} 44'32	
opposition	-1971 May 12 j 17:19	3° \mathbb{M} 49'21	1°47'45	opposition	-1963 May 31 j 02:25	21° \mathbb{M} 21'06	1°19'51
min. Earth dist.	-1971 May 12 j 18:19	3° \mathbb{M} 49'17	29.23052 AU	min. Earth dist.	-1963 May 30 j 21:58	21° \mathbb{M} 21'24	29.17433 AU
direct	-1971 Aug 01 j 03:30	2° \mathbb{M} 25'50		direct	-1963 Aug 19 j 00:14	19° \mathbb{M} 57'59	
conjunction	-1971 Nov 12 j 12:20	4° \mathbb{M} 54'10	1°39'28	conjunction	-1963 Nov 29 j 14:58	22° \mathbb{M} 25'50	1°12'52
minimum elong	-1971 Nov 12 j 12:20	4° \mathbb{M} 54'10	1°39'27	minimum elong	-1963 Nov 29 j 14:58	22° \mathbb{M} 25'50	1°12'50
max. Earth dist.	-1971 Nov 12 j 11:09	4° \mathbb{M} 54'03	31.22711 AU	max. Earth dist.	-1963 Nov 29 j 19:47	22° \mathbb{M} 26'18	31.16853 AU
retrograde	-1970 Feb 24 j 02:41	7° \mathbb{M} 23'23		retrograde	-1962 Mar 14 j 01:50	24° \mathbb{M} 56'20	
opposition	-1970 May 15 j 06:20	6° \mathbb{M} 00'20	1°44'46	opposition	-1962 Jun 02 j 15:24	23° \mathbb{M} 32'48	1°15'47
min. Earth dist.	-1970 May 15 j 07:20	6° \mathbb{M} 00'16	29.22566 AU	min. Earth dist.	-1962 Jun 02 j 09:08	23° \mathbb{M} 33'13	29.16365 AU
direct	-1970 Aug 03 j 14:17	4° \mathbb{M} 36'53		direct	-1962 Aug 21 j 10:40	22° \mathbb{M} 09'40	
conjunction	-1970 Nov 14 j 21:25	7° \mathbb{M} 05'09	1°36'37	conjunction	-1962 Dec 02 j 00:24	24° \mathbb{M} 37'28	1°09'00
minimum elong	-1970 Nov 14 j 21:26	7° \mathbb{M} 05'09	1°36'35	minimum elong	-1962 Dec 02 j 00:24	24° \mathbb{M} 37'28	1°08'58
max. Earth dist.	-1970 Nov 14 j 21:15	7° \mathbb{M} 05'08	31.22251 AU	max. Earth dist.	-1962 Dec 02 j 06:28	24° \mathbb{M} 38'02	31.15793 AU
retrograde	-1969 Feb 26 j 15:40	9° \mathbb{M} 34'32		retrograde	-1961 Mar 16 j 12:54	27° \mathbb{M} 08'06	
opposition	-1969 May 17 j 19:15	8° \mathbb{M} 11'28	1°41'38	opposition	-1961 Jun 05 j 04:34	25° \mathbb{M} 44'29	1°11'37
min. Earth dist.	-1969 May 17 j 18:18	8° \mathbb{M} 11'32	29.22093 AU	min. Earth dist.	-1961 Jun 04 j 22:16	25° \mathbb{M} 44'54	29.15335 AU
direct	-1969 Aug 06 j 01:54	6° \mathbb{M} 48'05		direct	-1961 Aug 23 j 21:37	24° \mathbb{M} 21'22	
conjunction	-1969 Nov 17 j 06:32	9° \mathbb{M} 16'19	1°33'36	conjunction	-1961 Dec 04 j 09:47	26° \mathbb{M} 49'05	1°05'03
minimum elong	-1969 Nov 17 j 06:32	9° \mathbb{M} 16'19	1°33'34	minimum elong	-1961 Dec 04 j 09:47	26° \mathbb{M} 49'05	1°05'01
max. Earth dist.	-1969 Nov 17 j 06:55	9° \mathbb{M} 16'21	31.21765 AU	max. Earth dist.	-1961 Dec 04 j 17:07	26° \mathbb{M} 49'47	31.14810 AU
retrograde	-1968 Feb 29 j 04:11	11° \mathbb{M} 45'53		retrograde	-1960 Mar 18 j 01:47	29° \mathbb{M} 19'53	
opposition	-1968 May 19 j 08:23	10° \mathbb{M} 22'47	1°38'20	opposition	-1960 Jun 06 j 17:35	27° \mathbb{M} 56'11	1°07'20
min. Earth dist.	-1968 May 19 j 07:34	10° \mathbb{M} 22'50	29.21588 AU	min. Earth dist.	-1960 Jun 06 j 09:05	27° \mathbb{M} 56'45	29.14390 AU
direct	-1968 Aug 07 j 12:04	8° \mathbb{M} 59'29		direct	-1960 Aug 25 j 08:44	26° \mathbb{M} 33'05	
conjunction	-1968 Nov 18 j 15:53	11° \mathbb{M} 27'40	1°30'28	conjunction	-1960 Dec 05 j 19:15	29° \mathbb{M} 00'47	1°01'00
minimum elong	-1968 Nov 18 j 15:54	11° \mathbb{M} 27'40	1°30'26	minimum elong	-1960 Dec 05 j 19:16	29° \mathbb{M} 00'47	1°00'58
max. Earth dist.	-1968 Nov 18 j 17:44	11° \mathbb{M} 27'51	31.21235 AU	max. Earth dist.	-1960 Dec 06 j 03:14	29° \mathbb{M} 01'32	31.13918 AU
retrograde	-1967 Mar 02 j 15:39	13° \mathbb{M} 57'24			-1959 Jan 01 j 12:05	0° \mathbb{M}	
opposition	-1967 May 21 j 21:32	12° \mathbb{M} 34'15	1°34'54	retrograde	-1959 Mar 20 j 14:32	1° \mathbb{M} 31'45	
min. Earth dist.	-1967 May 21 j 19:11	12° \mathbb{M} 34'25	29.21001 AU	opposition	-1959 Jun 09 j 06:46	0° \mathbb{M} 07'59	1°02'57
direct	-1967 Aug 10 j 01:08	11° \mathbb{M} 11'02		min. Earth dist.	-1959 Jun 08 j 22:07	0° \mathbb{M} 08'34	29.13555 AU
conjunction	-1967 Nov 21 j 01:08	13° \mathbb{M} 39'10	1°27'11		-1959 Jun 14 j 04:38	30° \mathbb{R} \mathbb{M}	
minimum elong	-1967 Nov 21 j 01:08	13° \mathbb{M} 39'10	1°27'09	direct	-1959 Aug 27 j 18:02	28° \mathbb{M} 44'55	
max. Earth dist.	-1967 Nov 21 j 02:43	13° \mathbb{M} 39'19	31.20599 AU		-1959 Nov 04 j 21:20	0° \mathbb{M}	
retrograde	-1967 Dec 28 j 13:07	15° \mathbb{M}		conjunction	-1959 Dec 08 j 04:49	1° \mathbb{M} 12'35	0°56'51
	-1966 Mar 05 j 04:44	16° \mathbb{M} 09'05		minimum elong	-1959 Dec 08 j 04:49	1° \mathbb{M} 12'35	0°56'49
	-1966 May 15 j 16:32	15° \mathbb{R} \mathbb{M}		max. Earth dist.	-1959 Dec 08 j 14:37	1° \mathbb{M} 13'31	31.13134 AU
opposition	-1966 May 24 j 10:48	14° \mathbb{M} 45'53	1°31'20	retrograde	-1958 Mar 23 j 02:50	3° \mathbb{M} 43'43	
min. Earth dist.	-1966 May 24 j 08:12	14° \mathbb{M} 46'03	29.20306 AU	opposition	-1958 Jun 11 j 19:48	2° \mathbb{M} 19'54	0°58'28
direct	-1966 Aug 12 j 12:32	13° \mathbb{M} 22'42		min. Earth dist.	-1958 Jun 11 j 09:20	2° \mathbb{M} 20'37	29.12795 AU
	-1966 Oct 31 j 16:00	15° \mathbb{M}		direct	-1958 Aug 30 j 07:02	0° \mathbb{M} 56'55	
conjunction	-1966 Nov 23 j 10:43	15° \mathbb{M} 50'48	1°23'46	conjunction	-1958 Dec 10 j 14:24	3° \mathbb{M} 24'34	0°52'37
minimum elong	-1966 Nov 23 j 10:44	15° \mathbb{M} 50'48	1°23'45	minimum elong	-1958 Dec 10 j 14:24	3° \mathbb{M} 24'34	0°52'35
max. Earth dist.	-1966 Nov 23 j 13:56	15° \mathbb{M} 51'06	31.19834 AU	max. Earth dist.	-1958 Dec 11 j 00:09	3° \mathbb{M} 25'29	31.12409 AU
retrograde	-1965 Mar 07 j 15:27	18° \mathbb{M} 20'51		retrograde	-1957 Mar 25 j 17:20	5° \mathbb{M} 55'51	
opposition	-1965 May 26 j 23:52	16° \mathbb{M} 57'36	1°27'38	opposition	-1957 Jun 14 j 08:50	4° \mathbb{M} 32'01	0°53'54
min. Earth dist.	-1965 May 26 j 20:37	16° \mathbb{M} 57'49	29.19458 AU	min. Earth dist.	-1957 Jun 13 j 21:56	4° \mathbb{M} 32'45	29.12092 AU
direct	-1965 Aug 15 j 01:31	15° \mathbb{M} 34'28		direct	-1957 Sep 01 j 18:01	3° \mathbb{M} 09'04	
conjunction	-1965 Nov 25 j 20:09	18° \mathbb{M} 02'29	1°20'15	conjunction	-1957 Dec 13 j 00:13	5° \mathbb{M} 36'43	0°48'18
minimum elong	-1965 Nov 25 j 20:10	18° \mathbb{M} 02'29	1°20'13	minimum elong	-1957 Dec 13 j 00:13	5° \mathbb{M} 36'43	0°48'16

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Attention, astronomical year style is used: The year -1957 in astronomical counting style is the year 1958 BCE in historical counting style.

max. Earth dist.	-1957 Dec 13 j 11:56	5°♂37'49	31.11716 AU	retrograde	-1948 Apr 14 j 09:18	25°♂49'52	
retrograde	-1956 Mar 27 j 04:45	8°♂08'11		opposition	-1948 Jul 04 j 07:16	24°♂25'20	0°09'54
opposition	-1956 Jun 15 j 22:02	6°♂44'19	0°49'14	min. Earth dist.	-1948 Jul 03 j 14:37	24°♂26'28	29.02985 AU
min. Earth dist.	-1956 Jun 15 j 10:14	6°♂45'07	29.11388 AU	direct	-1948 Sep 21 j 00:33	23°♂02'23	
direct	-1956 Sep 03 j 06:27	5°♂21'25					
				conjunction	-1948 Dec 31 j 19:38	25°♂29'46	0°07'00
conjunction	-1956 Dec 14 j 09:53	7°♂49'03	0°43'54	minimum elong	-1948 Dec 31 j 19:38	25°♂29'47	0°06'57
minimum elong	-1956 Dec 14 j 09:54	7°♂49'03	0°43'52	behind sun begin	-1948 Dec 31 j 13:40	25°♂29'14	
max. Earth dist.	-1956 Dec 14 j 21:29	7°♂50'09	31.11009 AU	behind sun end	-1947 Jan 01 j 01:36	25°♂30'19	
retrograde	-1955 Mar 29 j 17:50	10°♂20'42		max. Earth dist.	-1947 Jan 01 j 13:29	25°♂31'27	31.02435 AU
opposition	-1955 Jun 18 j 11:19	8°♂56'47	0°44'30	retrograde	-1947 Apr 16 j 20:58	28°♂02'30	
min. Earth dist.	-1955 Jun 17 j 22:36	8°♂57'39	29.10656 AU	opposition	-1947 Jul 06 j 20:15	26°♂37'54	0°04'50
direct	-1955 Sep 05 j 17:25	7°♂33'57		min. Earth dist.	-1947 Jul 06 j 02:32	26°♂39'07	29.01948 AU
				direct	-1947 Sep 23 j 12:48	25°♂14'57	
conjunction	-1955 Dec 16 j 20:00	10°♂01'34	0°39'27				
minimum elong	-1955 Dec 16 j 20:00	10°♂01'34	0°39'24	conjunction	-1946 Jan 03 j 06:03	27°♂42'21	0°02'15
max. Earth dist.	-1955 Dec 17 j 09:01	10°♂02'48	31.10230 AU	minimum elong	-1946 Jan 03 j 06:03	27°♂42'21	0°02'13
retrograde	-1954 Apr 01 j 04:52	12°♂33'23		behind sun begin	-1946 Jan 02 j 23:38	27°♂41'46	
min. Earth dist.	-1954 Jun 20 j 11:52	11°♂10'17	29.09827 AU	behind sun end	-1946 Jan 03 j 12:28	27°♂42'56	
opposition	-1954 Jun 21 j 00:29	11°♂09'25	0°39'42	max. Earth dist.	-1946 Jan 03 j 23:50	27°♂44'02	31.01464 AU
direct	-1954 Sep 08 j 05:41	9°♂46'37			-1946 Mar 19 j 17:20	0°♂	
				retrograde	-1946 Apr 19 j 10:59	0°♂15'13	
conjunction	-1954 Dec 19 j 06:07	12°♂14'12	0°34'55		-1946 May 20 j 17:37	30°♂	
minimum elong	-1954 Dec 19 j 06:07	12°♂14'12	0°34'53	desc. node	-1946 Jun 21 j 18:20	29°♂18'55	
max. Earth dist.	-1954 Dec 19 j 19:02	12°♂15'25	31.09351 AU	opposition	-1946 Jul 09 j 09:01	28°♂50'34	0°00'-14
retrograde	-1953 Apr 03 j 18:25	14°♂46'11		min. Earth dist.	-1946 Jul 08 j 14:21	28°♂51'51	29.01039 AU
opposition	-1953 Jun 23 j 13:40	13°♂22'09	0°34'50	direct	-1946 Sep 25 j 23:40	27°♂27'38	
min. Earth dist.	-1953 Jun 22 j 23:41	13°♂23'06	29.08878 AU				
direct	-1953 Sep 10 j 16:52	11°♂59'21		conjunction	-1945 Jan 05 j 16:38	29°♂55'04	0°-2'-36
				minimum elong	-1945 Jan 05 j 16:38	29°♂55'04	0°02'40
conjunction	-1953 Dec 21 j 16:15	14°♂26'54	0°30'21	behind sun begin	-1945 Jan 05 j 10:13	29°♂54'29	
minimum elong	-1953 Dec 21 j 16:15	14°♂26'54	0°30'18	behind sun end	-1945 Jan 05 j 23:03	29°♂55'39	
max. Earth dist.	-1953 Dec 22 j 05:46	14°♂28'11	31.08325 AU	max. Earth dist.	-1945 Jan 06 j 12:00	29°♂56'54	31.00598 AU
retrograde	-1952 Apr 05 j 05:06	16°♂59'02			-1945 Jan 07 j 20:39	0°♂	
opposition	-1952 Jun 25 j 03:02	15°♂34'55	0°29'55	retrograde	-1945 Apr 21 j 23:00	2°♂28'06	
min. Earth dist.	-1952 Jun 24 j 13:32	15°♂35'50	29.07786 AU	opposition	-1945 Jul 11 j 21:58	1°♂03'25	0°-5'-18
direct	-1952 Sep 12 j 03:54	14°♂12'06		min. Earth dist.	-1945 Jul 11 j 03:05	1°♂04'42	29.00220 AU
					-1945 Aug 24 j 17:06	30°♂	
conjunction	-1952 Dec 23 j 02:33	16°♂39'36	0°25'44	direct	-1945 Sep 28 j 11:49	29°♂40'32	
minimum elong	-1952 Dec 23 j 02:33	16°♂39'36	0°25'42		-1945 Nov 01 j 05:07	0°♂	
max. Earth dist.	-1952 Dec 23 j 16:51	16°♂40'57	31.07189 AU				
retrograde	-1951 Apr 07 j 17:42	19°♂11'51		conjunction	-1944 Jan 08 j 03:07	2°♂07'58	0°-7'-21
opposition	-1951 Jun 27 j 16:08	17°♂47'37	0°24'57	minimum elong	-1944 Jan 08 j 03:07	2°♂07'58	0°07'24
min. Earth dist.	-1951 Jun 27 j 01:06	17°♂48'39	29.06594 AU	behind sun begin	-1944 Jan 07 j 21:13	2°♂07'26	
direct	-1951 Sep 14 j 15:11	16°♂24'46		behind sun end	-1944 Jan 08 j 09:00	2°♂08'30	
				max. Earth dist.	-1944 Jan 08 j 22:48	2°♂09'50	30.99829 AU
conjunction	-1951 Dec 25 j 12:43	18°♂52'14	0°21'05	retrograde	-1944 Apr 23 j 13:03	4°♂41'10	
minimum elong	-1951 Dec 25 j 12:43	18°♂52'14	0°21'02	opposition	-1944 Jul 13 j 10:51	3°♂16'28	0°-10'-23
max. Earth dist.	-1951 Dec 26 j 03:07	18°♂53'35	31.05961 AU	min. Earth dist.	-1944 Jul 12 j 14:27	3°♂17'52	28.99483 AU
retrograde	-1950 Apr 10 j 06:21	21°♂24'36		direct	-1944 Sep 29 j 22:51	1°♂53'37	
opposition	-1950 Jun 30 j 05:20	20°♂00'15	0°19'58				
min. Earth dist.	-1950 Jun 29 j 14:41	20°♂01'15	29.05353 AU	conjunction	-1943 Jan 09 j 13:53	4°♂21'07	0°-12'-4
direct	-1950 Sep 17 j 00:57	18°♂37'22		minimum elong	-1943 Jan 09 j 13:52	4°♂21'07	0°12'08
				behind sun begin	-1943 Jan 09 j 09:28	4°♂20'43	
conjunction	-1950 Dec 27 j 23:04	21°♂04'47	0°16'24	behind sun end	-1943 Jan 09 j 18:17	4°♂21'31	
minimum elong	-1950 Dec 27 j 23:04	21°♂04'47	0°16'21	max. Earth dist.	-1943 Jan 10 j 10:18	4°♂23'03	30.99103 AU
max. Earth dist.	-1950 Dec 28 j 15:02	21°♂06'17	31.04720 AU	retrograde	-1943 Apr 26 j 00:06	6°♂54'29	
retrograde	-1949 Apr 12 j 18:47	23°♂37'15		opposition	-1943 Jul 15 j 23:47	5°♂29'46	0°-15'-27
opposition	-1949 Jul 02 j 18:11	22°♂12'49	0°14'56	min. Earth dist.	-1943 Jul 15 j 03:54	5°♂31'08	28.98774 AU
min. Earth dist.	-1949 Jul 02 j 01:59	22°♂13'55	29.04124 AU	direct	-1943 Oct 02 j 09:16	4°♂06'58	
direct	-1949 Sep 19 j 13:57	20°♂49'53					
				conjunction	-1942 Jan 12 j 00:54	6°♂34'30	0°-16'-48
conjunction	-1949 Dec 30 j 09:17	23°♂17'17	0°11'42	minimum elong	-1942 Jan 12 j 00:54	6°♂34'30	0°16'51
minimum elong	-1949 Dec 30 j 09:17	23°♂17'17	0°11'39	max. Earth dist.	-1942 Jan 12 j 22:06	6°♂36'30	30.98395 AU
behind sun begin	-1949 Dec 30 j 04:40	23°♂16'52		retrograde	-1942 Apr 28 j 13:20	9°♂08'02	
behind sun end	-1949 Dec 30 j 13:54	23°♂17'42		opposition	-1942 Jul 18 j 12:36	7°♂43'18	0°-20'-30
max. Earth dist.	-1949 Dec 31 j 01:05	23°♂18'46	31.03526 AU	min. Earth dist.	-1942 Jul 17 j 15:24	7°♂44'46	28.98044 AU

Attention, astronomical year style is used: The year -1942 in astronomical counting style is the year 1943 BCE in historical counting style.

direct	-1942 Oct 04 j 19:58	6° $\overline{20}$ 31		minimum elong	-1933 Feb 01 j 07:40	26° $\overline{38}$ 05	0°57'31
				max. Earth dist.	-1933 Feb 02 j 08:21	26° $\overline{40}$ 25	30.90299 AU
conjunction	-1941 Jan 14 j 11:56	8° $\overline{48}$ 06	0°-21'-30	retrograde	-1933 May 19 j 13:02	29° $\overline{12}$ 26	
minimum elong	-1941 Jan 14 j 11:56	8° $\overline{48}$ 06	0°21'34	min. Earth dist.	-1933 Aug 07 j 06:32	27° $\overline{48}$ 51	28.90074 AU
max. Earth dist.	-1941 Jan 15 j 08:50	8° $\overline{50}$ 05	30.97623 AU	opposition	-1933 Aug 08 j 06:42	27° $\overline{47}$ 10	-1°-3'-44
retrograde	-1941 May 01 j 02:20	11° $\overline{21}$ 47		direct	-1933 Oct 25 j 02:53	26° $\overline{24}$ 06	
min. Earth dist.	-1941 Jul 20 j 05:08	9° $\overline{58}$ 26	28.97243 AU				
opposition	-1941 Jul 21 j 01:32	9° $\overline{57}$ 02	0°-25'-31	conjunction	-1932 Feb 03 j 19:27	28° $\overline{51}$ 54	-1°-1'-39
direct	-1941 Oct 07 j 05:06	8° $\overline{34}$ 14		minimum elong	-1932 Feb 03 j 19:26	28° $\overline{51}$ 54	1°01'41
				max. Earth dist.	-1932 Feb 04 j 19:59	28° $\overline{54}$ 13	30.89757 AU
conjunction	-1940 Jan 16 j 23:18	11° $\overline{01}$ 52	0°-26'-10		-1932 Mar 05 j 20:53	0° \approx	
minimum elong	-1940 Jan 16 j 23:18	11° $\overline{01}$ 52	0°26'14	retrograde	-1932 May 21 j 01:27	1° \approx 26'21	
max. Earth dist.	-1940 Jan 17 j 21:16	11° $\overline{03}$ 57	30.96774 AU	opposition	-1932 Aug 09 j 19:16	0° \approx 01'04	-1°-8'-9
retrograde	-1940 May 02 j 15:24	13° $\overline{35}$ 40		min. Earth dist.	-1932 Aug 08 j 19:46	0° \approx 02'42	28.89599 AU
opposition	-1940 Jul 22 j 14:25	12° $\overline{10}$ 52	0°-30'-30		-1932 Aug 10 j 10:42	30° \overline{R} $\overline{3}$	
min. Earth dist.	-1940 Jul 21 j 17:00	12° $\overline{12}$ 21	28.96339 AU	direct	-1932 Oct 26 j 12:18	28° $\overline{38}$ 00	
direct	-1940 Oct 08 j 17:53	10° $\overline{48}$ 04			-1931 Jan 06 j 06:51	0° \approx	
conjunction	-1939 Jan 18 j 10:31	13° $\overline{15}$ 43	0°-30'-49	conjunction	-1931 Feb 05 j 07:28	1° \approx 05'53	-1°-5'-44
minimum elong	-1939 Jan 18 j 10:31	13° $\overline{15}$ 43	0°30'52	minimum elong	-1931 Feb 05 j 07:27	1° \approx 05'52	1°05'48
max. Earth dist.	-1939 Jan 19 j 07:36	13° $\overline{17}$ 43	30.95821 AU	max. Earth dist.	-1931 Feb 06 j 09:15	1° \approx 08'19	30.89326 AU
retrograde	-1939 May 05 j 06:07	15° $\overline{49}$ 38		retrograde	-1931 May 23 j 14:05	3° \approx 40'26	
min. Earth dist.	-1939 Jul 24 j 06:18	14° $\overline{26}$ 12	28.95347 AU	min. Earth dist.	-1931 Aug 11 j 07:11	2° \approx 16'51	28.89198 AU
opposition	-1939 Jul 25 j 03:23	14° $\overline{24}$ 45	0°-35'-27	opposition	-1931 Aug 12 j 07:39	2° \approx 15'09	-1°-12'-29
direct	-1939 Oct 11 j 04:04	13° $\overline{01}$ 54		direct	-1931 Oct 29 j 00:14	0° \approx 52'06	
conjunction	-1938 Jan 20 j 22:03	15° $\overline{29}$ 34	0°-35'-24	conjunction	-1930 Feb 07 j 19:36	3° \approx 20'03	-1°-9'-44
minimum elong	-1938 Jan 20 j 22:03	15° $\overline{29}$ 34	0°35'27	minimum elong	-1930 Feb 07 j 19:35	3° \approx 20'03	1°09'47
max. Earth dist.	-1938 Jan 21 j 20:28	15° $\overline{31}$ 41	30.94786 AU	max. Earth dist.	-1930 Feb 08 j 20:26	3° \approx 22'24	30.88941 AU
retrograde	-1938 May 07 j 18:05	18° $\overline{03}$ 33		retrograde	-1930 May 26 j 04:15	5° \approx 54'43	
opposition	-1938 Jul 27 j 15:59	16° $\overline{38}$ 36	0°-40'-20	opposition	-1930 Aug 14 j 20:00	4° \approx 29'27	-1°-16'-43
min. Earth dist.	-1938 Jul 26 j 18:31	16° $\overline{40}$ 04	28.94286 AU	min. Earth dist.	-1930 Aug 13 j 20:07	4° \approx 31'07	28.88832 AU
direct	-1938 Oct 13 j 16:08	15° $\overline{15}$ 41		direct	-1930 Oct 31 j 09:28	3° \approx 06'24	
conjunction	-1937 Jan 23 j 09:25	17° $\overline{43}$ 21	0°-39'-57	conjunction	-1929 Feb 10 j 08:01	5° \approx 34'28	-1°-13'-38
minimum elong	-1937 Jan 23 j 09:25	17° $\overline{43}$ 21	0°40'00	minimum elong	-1929 Feb 10 j 08:01	5° \approx 34'28	1°13'42
max. Earth dist.	-1937 Jan 24 j 07:16	17° $\overline{45}$ 25	30.93726 AU	max. Earth dist.	-1929 Feb 11 j 09:57	5° \approx 36'55	30.88555 AU
retrograde	-1937 May 10 j 09:06	20° $\overline{17}$ 24		retrograde	-1929 May 28 j 17:11	8° \approx 09'12	
min. Earth dist.	-1937 Jul 29 j 06:45	18° $\overline{53}$ 52	28.93245 AU	min. Earth dist.	-1929 Aug 16 j 08:24	6° \approx 45'38	28.88425 AU
opposition	-1937 Jul 30 j 04:41	18° $\overline{52}$ 21	0°-45'-9	opposition	-1929 Aug 17 j 08:23	6° \approx 43'58	-1°-20'-49
direct	-1937 Oct 16 j 03:53	17° $\overline{29}$ 24		direct	-1929 Nov 02 j 21:04	5° \approx 20'55	
conjunction	-1936 Jan 25 j 20:47	19° $\overline{57}$ 04	0°-44'-26	conjunction	-1928 Feb 12 j 20:21	7° \approx 49'03	-1°-17'-26
minimum elong	-1936 Jan 25 j 20:47	19° $\overline{57}$ 04	0°44'29	minimum elong	-1928 Feb 12 j 20:20	7° \approx 49'03	1°17'28
max. Earth dist.	-1936 Jan 26 j 19:59	19° $\overline{59}$ 16	30.92696 AU	max. Earth dist.	-1928 Feb 13 j 21:11	7° \approx 51'24	30.88117 AU
retrograde	-1936 May 11 j 21:47	22° $\overline{31}$ 11		retrograde	-1928 May 30 j 08:46	10° \approx 23'53	
opposition	-1936 Jul 31 j 17:22	21° $\overline{06}$ 03	0°-49'-55	opposition	-1928 Aug 18 j 20:53	8° \approx 58'38	-1°-24'-48
min. Earth dist.	-1936 Jul 30 j 19:27	21° $\overline{07}$ 34	28.92262 AU	min. Earth dist.	-1928 Aug 17 j 21:02	9° \approx 00'17	28.87952 AU
direct	-1936 Oct 17 j 16:47	19° $\overline{43}$ 03		direct	-1928 Nov 04 j 08:28	7° \approx 35'34	
conjunction	-1935 Jan 27 j 08:20	22° $\overline{10}$ 44	0°-48'-51	conjunction	-1927 Feb 14 j 09:06	10° \approx 03'48	-1°-21'-6
minimum elong	-1935 Jan 27 j 08:19	22° $\overline{10}$ 44	0°48'54	minimum elong	-1927 Feb 14 j 09:05	10° \approx 03'48	1°21'09
max. Earth dist.	-1935 Jan 28 j 07:35	22° $\overline{12}$ 56	30.91772 AU	max. Earth dist.	-1927 Feb 15 j 10:28	10° \approx 06'11	30.87579 AU
retrograde	-1935 May 14 j 11:41	24° $\overline{44}$ 55		retrograde	-1927 Jun 01 j 21:58	12° \approx 38'41	
min. Earth dist.	-1935 Aug 02 j 06:37	23° $\overline{21}$ 19	28.91405 AU	min. Earth dist.	-1927 Aug 20 j 10:10	11° \approx 15'00	28.87368 AU
opposition	-1935 Aug 03 j 05:48	23° $\overline{19}$ 43	0°-54'-36	opposition	-1927 Aug 21 j 09:12	11° \approx 13'24	-1°-28'-40
direct	-1935 Oct 20 j 04:17	21° $\overline{56}$ 40		direct	-1927 Nov 06 j 21:05	9° \approx 50'19	
conjunction	-1934 Jan 29 j 19:58	24° $\overline{24}$ 23	0°-53'-11	conjunction	-1926 Feb 16 j 21:50	12° \approx 18'35	-1°-24'-39
minimum elong	-1934 Jan 29 j 19:58	24° $\overline{24}$ 23	0°53'14	minimum elong	-1926 Feb 16 j 21:50	12° \approx 18'35	1°24'41
max. Earth dist.	-1934 Jan 30 j 19:49	24° $\overline{26}$ 38	30.90963 AU	max. Earth dist.	-1926 Feb 17 j 22:21	12° \approx 20'54	30.86956 AU
retrograde	-1934 May 16 j 23:17	26° $\overline{58}$ 39		retrograde	-1926 Jun 04 j 12:40	14° \approx 53'30	
opposition	-1934 Aug 05 j 18:21	25° $\overline{33}$ 24	0°-59'-12	opposition	-1926 Aug 23 j 21:26	13° \approx 28'12	-1°-32'-24
min. Earth dist.	-1934 Aug 04 j 19:38	25° $\overline{34}$ 59	28.90673 AU	min. Earth dist.	-1926 Aug 22 j 21:56	13° \approx 29'50	28.86709 AU
direct	-1934 Oct 22 j 15:25	24° $\overline{10}$ 20		direct	-1926 Nov 09 j 09:02	12° \approx 05'03	
conjunction	-1933 Feb 01 j 07:41	26° $\overline{38}$ 05	0°-57'-27	conjunction	-1925 Feb 19 j 10:30	14° \approx 33'23	-1°-28'-4

Attention, astronomical year style is used: The year -1925 in astronomical counting style is the year 1926 BCE in historical counting style.

minimum elong	-1925 Feb 19 j 10:30	14° \approx 33'23	1°28'08	direct	-1918 Nov 27 j 02:43	0° \approx 03'03	
max. Earth dist.	-1925 Feb 20 j 10:59	14° \approx 35'42	30.86257 AU				
	-1925 Mar 03 j 05:47	15° \approx		conjunction	-1917 Mar 09 j 19:00	2° \approx 31'59	-1°-50'-14
retrograde	-1925 Jun 07 j 01:15	17° \approx 08'19		minimum elong	-1917 Mar 09 j 19:00	2° \approx 31'59	1°50'17
min. Earth dist.	-1925 Aug 25 j 11:15	15° \approx 44'32	28.86009 AU	max. Earth dist.	-1917 Mar 10 j 18:48	2° \approx 34'14	30.83488 AU
opposition	-1925 Aug 26 j 09:42	15° \approx 42'58	-1°-35'-59	retrograde	-1917 Jun 25 j 11:18	5° \approx 07'02	
	-1925 Sep 22 j 06:46	15° \approx		min. Earth dist.	-1917 Sep 12 j 10:36	3° \approx 43'13	28.83610 AU
direct	-1925 Nov 11 j 20:55	14° \approx 19'46		opposition	-1917 Sep 13 j 08:42	3° \approx 41'40	-1°-59'-1
	-1925 Dec 30 j 16:45	15° \approx		direct	-1917 Nov 29 j 14:16	2° \approx 18'13	
conjunction	-1924 Feb 21 j 23:20	16° \approx 48'08	-1°-31'-21	conjunction	-1916 Mar 11 j 08:39	4° \approx 47'16	-1°-52'-18
minimum elong	-1924 Feb 21 j 23:20	16° \approx 48'08	1°31'24	minimum elong	-1916 Mar 11 j 08:39	4° \approx 47'16	1°52'19
max. Earth dist.	-1924 Feb 23 j 00:02	16° \approx 50'28	30.85572 AU	max. Earth dist.	-1916 Mar 12 j 08:06	4° \approx 49'28	30.83440 AU
retrograde	-1924 Jun 08 j 16:00	19° \approx 23'05		retrograde	-1916 Jun 27 j 00:57	7° \approx 22'18	
opposition	-1924 Aug 27 j 21:41	17° \approx 57'41	-1°-39'-26	opposition	-1916 Sep 14 j 20:30	5° \approx 56'57	-2°-1'-8
min. Earth dist.	-1924 Aug 26 j 22:20	17° \approx 59'19	28.85348 AU	min. Earth dist.	-1916 Sep 13 j 23:56	5° \approx 58'24	28.83540 AU
direct	-1924 Nov 13 j 09:15	16° \approx 34'25		direct	-1916 Dec 01 j 02:33	4° \approx 33'28	
conjunction	-1923 Feb 23 j 12:07	19° \approx 02'51	-1°-34'-30	conjunction	-1915 Mar 13 j 22:30	7° \approx 02'36	-1°-54'-10
minimum elong	-1923 Feb 23 j 12:07	19° \approx 02'51	1°34'34	minimum elong	-1915 Mar 13 j 22:30	7° \approx 02'36	1°54'13
max. Earth dist.	-1923 Feb 24 j 12:18	19° \approx 05'08	30.84933 AU	max. Earth dist.	-1915 Mar 14 j 21:20	7° \approx 04'45	30.83333 AU
retrograde	-1923 Jun 11 j 03:37	21° \approx 37'48		retrograde	-1915 Jun 29 j 15:59	9° \approx 37'36	
min. Earth dist.	-1923 Aug 29 j 11:30	20° \approx 13'56	28.84766 AU	min. Earth dist.	-1915 Sep 16 j 11:20	8° \approx 13'44	28.83380 AU
opposition	-1923 Aug 30 j 09:48	20° \approx 12'22	-1°-42'-43	opposition	-1915 Sep 17 j 08:12	8° \approx 12'16	-2°-3'-3
direct	-1923 Nov 15 j 19:28	18° \approx 49'03		direct	-1915 Dec 03 j 15:50	6° \approx 48'44	
conjunction	-1922 Feb 26 j 01:10	21° \approx 17'32	-1°-37'-31	conjunction	-1914 Mar 16 j 12:19	9° \approx 17'57	-1°-55'-53
minimum elong	-1922 Feb 26 j 01:10	21° \approx 17'32	1°37'33	minimum elong	-1914 Mar 16 j 12:19	9° \approx 17'57	1°55'54
max. Earth dist.	-1922 Feb 27 j 02:13	21° \approx 19'54	30.84399 AU	max. Earth dist.	-1914 Mar 17 j 09:53	9° \approx 19'58	30.83113 AU
retrograde	-1922 Jun 13 j 15:37	23° \approx 52'30		retrograde	-1914 Jul 02 j 04:13	11° \approx 52'53	
opposition	-1922 Sep 01 j 21:32	22° \approx 27'02	-1°-45'-51	opposition	-1914 Sep 19 j 19:53	10° \approx 27'33	-2°-4'-46
min. Earth dist.	-1922 Aug 31 j 22:27	22° \approx 28'40	28.84292 AU	min. Earth dist.	-1914 Sep 19 j 00:44	10° \approx 28'54	28.83124 AU
direct	-1922 Nov 18 j 07:33	21° \approx 03'41		direct	-1914 Dec 06 j 02:44	9° \approx 03'57	
conjunction	-1921 Feb 28 j 14:03	23° \approx 32'14	-1°-40'-22	conjunction	-1913 Mar 19 j 02:15	11° \approx 33'12	-1°-57'-25
minimum elong	-1921 Feb 28 j 14:03	23° \approx 32'14	1°40'25	minimum elong	-1913 Mar 19 j 02:15	11° \approx 33'12	1°57'27
max. Earth dist.	-1921 Mar 01 j 14:04	23° \approx 34'30	30.83987 AU	max. Earth dist.	-1913 Mar 19 j 23:56	11° \approx 35'14	30.82828 AU
retrograde	-1921 Jun 16 j 04:59	26° \approx 07'13		retrograde	-1913 Jul 04 j 17:18	14° \approx 08'04	
min. Earth dist.	-1921 Sep 03 j 10:56	24° \approx 43'20	28.83962 AU	opposition	-1913 Sep 22 j 07:23	12° \approx 42'42	-2°-6'-19
opposition	-1921 Sep 04 j 09:31	24° \approx 41'45	-1°-48'-50	min. Earth dist.	-1913 Sep 21 j 12:02	12° \approx 44'04	28.82812 AU
direct	-1921 Nov 20 j 16:28	23° \approx 18'21		direct	-1913 Dec 08 j 15:33	11° \approx 19'02	
conjunction	-1920 Mar 02 j 03:05	25° \approx 47'00	-1°-43'-5	conjunction	-1912 Mar 20 j 15:55	13° \approx 48'20	-1°-58'-46
minimum elong	-1920 Mar 02 j 03:05	25° \approx 47'00	1°43'06	minimum elong	-1912 Mar 20 j 15:55	13° \approx 48'20	1°58'47
max. Earth dist.	-1920 Mar 03 j 04:16	25° \approx 49'22	30.83716 AU	max. Earth dist.	-1912 Mar 21 j 12:00	13° \approx 50'13	30.82509 AU
retrograde	-1920 Jun 17 j 17:12	28° \approx 22'00		retrograde	-1912 Jul 06 j 06:20	16° \approx 23'08	
opposition	-1920 Sep 05 j 21:22	26° \approx 56'33	-1°-51'-38	opposition	-1912 Sep 23 j 18:54	14° \approx 57'44	-2°-7'-40
min. Earth dist.	-1920 Sep 04 j 22:33	26° \approx 58'09	28.83752 AU	min. Earth dist.	-1912 Sep 23 j 00:41	14° \approx 59'02	28.82505 AU
direct	-1920 Nov 22 j 04:04	25° \approx 33'08		direct	-1912 Dec 10 j 01:32	13° \approx 33'59	
conjunction	-1919 Mar 04 j 16:15	28° \approx 01'52	-1°-45'-38	conjunction	-1911 Mar 23 j 05:56	16° \approx 03'20	-1°-59'-56
minimum elong	-1919 Mar 04 j 16:15	28° \approx 01'52	1°45'40	minimum elong	-1911 Mar 23 j 05:55	16° \approx 03'20	1°59'58
max. Earth dist.	-1919 Mar 05 j 16:20	28° \approx 04'07	30.83570 AU	max. Earth dist.	-1911 Mar 24 j 02:35	16° \approx 05'17	30.82215 AU
	-1919 May 03 j 02:12	0° \approx		retrograde	-1911 Jul 08 j 17:29	18° \approx 38'02	
retrograde	-1919 Jun 20 j 07:35	0° \approx 36'52		opposition	-1911 Sep 26 j 06:05	17° \approx 12'38	-2°-8'-49
	-1919 Aug 08 j 16:49	30° \approx		min. Earth dist.	-1911 Sep 25 j 12:04	17° \approx 13'55	28.82240 AU
min. Earth dist.	-1919 Sep 07 j 10:28	29° \approx 13'02	28.83663 AU	direct	-1911 Dec 12 j 13:48	15° \approx 48'48	
opposition	-1919 Sep 08 j 09:07	29° \approx 11'27	-1°-54'-16				
direct	-1919 Nov 24 j 14:56	27° \approx 48'01		conjunction	-1910 Mar 25 j 19:47	18° \approx 18'13	-2°00'-56
	-1918 Feb 27 j 18:18	0° \approx		minimum elong	-1910 Mar 25 j 19:47	18° \approx 18'13	2°00'57
conjunction	-1918 Mar 07 j 05:40	0° \approx 16'51	-1°-48'-1	max. Earth dist.	-1910 Mar 26 j 14:55	18° \approx 20'01	30.82000 AU
minimum elong	-1918 Mar 07 j 05:40	0° \approx 16'51	1°48'03	retrograde	-1910 Jul 11 j 06:29	20° \approx 52'51	
max. Earth dist.	-1918 Mar 08 j 06:26	0° \approx 19'11	30.83507 AU	opposition	-1910 Sep 28 j 17:22	19° \approx 27'26	-2°-9'-47
retrograde	-1918 Jun 22 j 20:11	2° \approx 51'53		min. Earth dist.	-1910 Sep 27 j 23:41	19° \approx 28'42	28.82088 AU
opposition	-1918 Sep 10 j 20:56	1° \approx 26'29	-1°-56'-44	direct	-1910 Dec 15 j 00:31	18° \approx 03'32	
min. Earth dist.	-1918 Sep 09 j 23:05	1° \approx 28'01	28.83628 AU	conjunction	-1909 Mar 28 j 09:35	20° \approx 33'02	-2°-1'-44

Attention, astronomical year style is used: The year -1909 in astronomical counting style is the year 1910 BCE in historical counting style.

minimum elong	-1909 Mar 28 j 09:35	20° Υ 33'02	2°01'46	minimum elong	-1901 Apr 16 j 03:19	8° Υ 33'51	2°01'26
max. Earth dist.	-1909 Mar 29 j 05:24	20° Υ 34'53	30.81900 AU	max. Earth dist.	-1901 Apr 16 j 16:07	8° Υ 35'03	30.84550 AU
retrograde	-1909 Jul 13 j 17:58	23° Υ 07'35		retrograde	-1901 Aug 01 j 03:42	11° Υ 07'46	
min. Earth dist.	-1909 Sep 30 j 11:39	21° Υ 43'24	28.82061 AU	opposition	-1901 Oct 18 j 20:57	9° Υ 42'50	-2°-9'-23
opposition	-1909 Oct 01 j 04:37	21° Υ 42'12	-2°-10'-33	min. Earth dist.	-1901 Oct 18 j 09:16	9° Υ 43'40	28.84816 AU
direct	-1909 Dec 17 j 12:00	20° Υ 18'14		direct	-1900 Jan 04 j 09:54	8° Υ 18'40	
conjunction	-1908 Mar 29 j 23:31	22° Υ 47'49	-2°-2'-22	conjunction	-1900 Apr 17 j 17:53	10° Υ 49'03	-2°00'-33
minimum elong	-1908 Mar 29 j 23:31	22° Υ 47'49	2°02'22	minimum elong	-1900 Apr 17 j 17:53	10° Υ 49'03	2°00'33
max. Earth dist.	-1908 Mar 30 j 18:15	22° Υ 49'34	30.81959 AU	max. Earth dist.	-1900 Apr 18 j 06:43	10° Υ 50'15	30.84788 AU
retrograde	-1908 Jul 15 j 08:13	25° Υ 22'19		retrograde	-1900 Aug 02 j 14:47	13° Υ 22'49	
opposition	-1908 Oct 02 j 15:40	23° Υ 56'57	-2°-11'-6	opposition	-1900 Oct 20 j 07:44	11° Υ 57'54	-2°-8'-21
min. Earth dist.	-1908 Oct 01 j 22:22	23° Υ 58'10	28.82198 AU	min. Earth dist.	-1900 Oct 19 j 21:25	11° Υ 58'38	28.85036 AU
direct	-1908 Dec 18 j 23:23	22° Υ 32'57					
conjunction	-1907 Apr 01 j 13:34	25° Υ 02'39	-2°-2'-47				
minimum elong	-1907 Apr 01 j 13:35	25° Υ 02'39	2°02'49				
max. Earth dist.	-1907 Apr 02 j 08:13	25° Υ 04'23	30.82162 AU				
retrograde	-1907 Jul 17 j 21:06	27° Υ 37'05					
min. Earth dist.	-1907 Oct 04 j 10:50	26° Υ 12'54	28.82474 AU				
opposition	-1907 Oct 05 j 02:52	26° Υ 11'46	-2°-11'-28				
direct	-1907 Dec 21 j 11:38	24° Υ 47'46					
conjunction	-1906 Apr 04 j 03:39	27° Υ 17'34	-2°-3'-2				
minimum elong	-1906 Apr 04 j 03:39	27° Υ 17'34	2°03'03				
max. Earth dist.	-1906 Apr 04 j 21:46	27° Υ 19'16	30.82511 AU				
retrograde	-1906 Jul 20 j 11:31	29° Υ 51'56					
opposition	-1906 Oct 07 j 13:48	28° Υ 26'42	-2°-11'-37				
min. Earth dist.	-1906 Oct 06 j 21:19	28° Υ 27'53	28.82870 AU				
direct	-1906 Dec 24 j 00:42	27° Υ 02'42					
conjunction	-1905 Apr 06 j 17:46	29° Υ 32'38	-2°-3'-5				
minimum elong	-1905 Apr 06 j 17:46	29° Υ 32'38	2°03'07				
max. Earth dist.	-1905 Apr 07 j 10:56	29° Υ 34'14	30.82947 AU				
retrograde	-1905 Apr 18 j 23:41	0° Υ					
min. Earth dist.	-1905 Jul 23 j 00:20	2° Υ 06'57					
opposition	-1905 Oct 09 j 10:07	0° Υ 42'51	28.83341 AU				
direct	-1905 Oct 10 j 00:55	0° Υ 41'48	-2°-11'-34				
	-1905 Nov 04 j 16:59	30° Υ					
	-1905 Dec 26 j 11:16	29° Υ 17'47					
	-1904 Feb 14 j 23:18	0° Υ					
conjunction	-1904 Apr 08 j 08:04	1° Υ 47'50	-2°-2'-57				
minimum elong	-1904 Apr 08 j 08:05	1° Υ 47'50	2°02'57				
max. Earth dist.	-1904 Apr 09 j 01:10	1° Υ 49'26	30.83434 AU				
retrograde	-1904 Jul 24 j 14:40	4° Υ 22'05					
opposition	-1904 Oct 11 j 11:54	2° Υ 57'01	-2°-11'-19				
min. Earth dist.	-1904 Oct 10 j 21:11	2° Υ 58'04	28.83809 AU				
direct	-1904 Dec 28 j 00:15	1° Υ 33'00					
conjunction	-1903 Apr 10 j 22:29	4° Υ 03'10	-2°-2'-38				
minimum elong	-1903 Apr 10 j 22:29	4° Υ 03'10	2°02'38				
max. Earth dist.	-1903 Apr 11 j 13:32	4° Υ 04'35	30.83878 AU				
retrograde	-1903 Jul 27 j 04:02	6° Υ 37'20					
opposition	-1903 Oct 13 j 22:56	5° Υ 12'19	-2°-10'-52				
min. Earth dist.	-1903 Oct 13 j 09:46	5° Υ 13'15	28.84228 AU				
direct	-1903 Dec 30 j 10:28	3° Υ 48'17					
conjunction	-1902 Apr 13 j 13:05	6° Υ 18'32	-2°-2'-7				
minimum elong	-1902 Apr 13 j 13:05	6° Υ 18'32	2°02'07				
max. Earth dist.	-1902 Apr 14 j 04:03	6° Υ 19'56	30.84254 AU				
retrograde	-1902 Jul 29 j 15:09	8° Υ 52'35					
opposition	-1902 Oct 16 j 09:57	7° Υ 27'37	-2°-10'-13				
min. Earth dist.	-1902 Oct 15 j 21:24	7° Υ 28'31	28.84552 AU				
direct	-1901 Jan 01 j 23:13	6° Υ 03'32					
conjunction	-1901 Apr 16 j 03:19	8° Υ 33'51	-2°-1'-25				

Planetary Phenomena of Neptune from -1900 through -1400 (UT), Astrodienst AG 7-Dez-2017 14:44, page 1

Attention, astronomical year style is used: The year -1900 in astronomical counting style is the year 1901 BCE in historical counting style.

direct	-1900 Jan 04 j 09:54	8°♊18'40		conjunction	-1892 May 06 j 12:29	28°♊45'41	-1°-47'-8
				minimum elong	-1892 May 06 j 12:30	28°♊45'41	1°47'08
conjunction	-1900 Apr 17 j 17:53	10°♊49'03	-2°00'-33	max. Earth dist.	-1892 May 06 j 18:01	28°♊46'12	30.89342 AU
minimum elong	-1900 Apr 17 j 17:53	10°♊49'03	2°00'33		-1892 Jun 10 j 04:39	0°♋	
max. Earth dist.	-1900 Apr 18 j 06:43	10°♊50'15	30.84788 AU	retrograde	-1892 Aug 20 j 18:10	1°♋18'16	
retrograde	-1900 Aug 02 j 14:47	13°♊22'49			-1892 Nov 03 j 05:14	30°♌	
opposition	-1900 Oct 20 j 07:44	11°♊57'54	-2°-8'-21	opposition	-1892 Nov 06 j 20:12	29°♊53'49	-1°-53'-15
min. Earth dist.	-1900 Oct 19 j 21:25	11°♊58'38	28.85036 AU	min. Earth dist.	-1892 Nov 06 j 15:02	29°♊54'11	28.89923 AU
direct	-1899 Jan 05 j 21:05	10°♊33'39		direct	-1891 Jan 23 j 21:10	28°♊29'16	
					-1891 Apr 11 j 09:24	0°♋	
conjunction	-1899 Apr 20 j 08:18	13°♊04'04	-1°-59'-29				
minimum elong	-1899 Apr 20 j 08:19	13°♊04'04	1°59'30	conjunction	-1891 May 09 j 03:09	1°♋00'17	-1°-44'-41
max. Earth dist.	-1899 Apr 20 j 19:23	13°♊05'06	30.85021 AU	minimum elong	-1891 May 09 j 03:10	1°♋00'17	1°44'41
retrograde	-1899 Aug 05 j 03:20	15°♊37'40		max. Earth dist.	-1891 May 09 j 08:37	1°♋00'47	30.90286 AU
opposition	-1899 Oct 22 j 18:27	14°♊12'46	-2°-7'-7	retrograde	-1891 Aug 23 j 05:16	3°♋32'44	
min. Earth dist.	-1899 Oct 22 j 08:15	14°♊13'30	28.85277 AU	opposition	-1891 Nov 09 j 06:49	2°♋08'24	-1°-50'-33
direct	-1898 Jan 08 j 09:01	12°♊48'26		min. Earth dist.	-1891 Nov 09 j 03:11	2°♋08'40	28.90832 AU
				direct	-1890 Jan 26 j 08:09	0°♋43'51	
conjunction	-1898 Apr 22 j 22:39	15°♊18'54	-1°-58'-15				
minimum elong	-1898 Apr 22 j 22:39	15°♊18'54	1°58'15	conjunction	-1890 May 11 j 17:32	3°♋14'56	-1°-42'-5
max. Earth dist.	-1898 Apr 23 j 09:26	15°♊19'54	30.85278 AU	minimum elong	-1890 May 11 j 17:32	3°♋14'56	1°42'04
retrograde	-1898 Aug 07 j 14:12	17°♊52'20		max. Earth dist.	-1890 May 11 j 20:50	3°♋15'15	30.91164 AU
opposition	-1898 Oct 25 j 05:10	16°♊27'27	-2°-5'-42	retrograde	-1890 Aug 25 j 17:28	5°♋47'16	
min. Earth dist.	-1898 Oct 24 j 20:29	16°♊28'04	28.85573 AU	opposition	-1890 Nov 11 j 17:19	4°♋23'01	-1°-47'-41
direct	-1897 Jan 10 j 21:28	15°♊03'02		min. Earth dist.	-1890 Nov 11 j 14:03	4°♋23'15	28.91661 AU
				direct	-1889 Jan 28 j 19:54	2°♋58'26	
conjunction	-1897 Apr 25 j 12:56	17°♊33'32	-1°-56'-50				
minimum elong	-1897 Apr 25 j 12:56	17°♊33'32	1°56'51	conjunction	-1889 May 14 j 08:06	5°♋29'37	-1°-39'-20
max. Earth dist.	-1897 Apr 25 j 22:49	17°♊34'28	30.85636 AU	minimum elong	-1889 May 14 j 08:06	5°♋29'37	1°39'20
retrograde	-1897 Aug 10 j 03:20	20°♊06'49		max. Earth dist.	-1889 May 14 j 10:43	5°♋29'51	30.91939 AU
opposition	-1897 Oct 27 j 15:39	18°♊41'57	-2°-4'-5	retrograde	-1889 Aug 28 j 03:53	8°♋01'46	
min. Earth dist.	-1897 Oct 27 j 06:34	18°♊42'36	28.85983 AU	opposition	-1889 Nov 14 j 03:51	6°♋37'36	-1°-44'-39
direct	-1896 Jan 13 j 10:33	17°♊17'28		min. Earth dist.	-1889 Nov 14 j 02:35	6°♋37'41	28.92385 AU
				direct	-1888 Jan 31 j 07:52	5°♋12'59	
conjunction	-1896 Apr 27 j 03:10	19°♊48'02	-1°-55'-14				
minimum elong	-1896 Apr 27 j 03:11	19°♊48'02	1°55'14	conjunction	-1888 May 15 j 22:33	7°♋44'12	-1°-36'-26
max. Earth dist.	-1896 Apr 27 j 12:11	19°♊48'52	30.86109 AU	minimum elong	-1888 May 15 j 22:33	7°♋44'12	1°36'25
retrograde	-1896 Aug 11 j 15:27	22°♊21'09		max. Earth dist.	-1888 May 15 j 23:31	7°♋44'18	30.92632 AU
opposition	-1896 Oct 29 j 02:20	20°♊56'20	-2°-2'-17	retrograde	-1888 Aug 29 j 16:35	10°♋16'12	
min. Earth dist.	-1896 Oct 28 j 18:47	20°♊56'52	28.86527 AU	opposition	-1888 Nov 15 j 14:13	8°♋52'05	-1°-41'-29
direct	-1895 Jan 14 j 21:44	19°♊31'48		min. Earth dist.	-1888 Nov 15 j 13:02	8°♋52'10	28.93023 AU
				direct	-1887 Feb 01 j 20:50	7°♋27'24	
conjunction	-1895 Apr 29 j 17:34	22°♊02'26	-1°-53'-28				
minimum elong	-1895 Apr 29 j 17:35	22°♊02'26	1°53'29	conjunction	-1887 May 18 j 12:59	9°♋58'41	-1°-33'-23
max. Earth dist.	-1895 Apr 30 j 02:30	22°♊03'15	30.86733 AU	minimum elong	-1887 May 18 j 12:59	9°♋58'41	1°33'23
retrograde	-1895 Aug 14 j 04:54	24°♊35'23		max. Earth dist.	-1887 May 18 j 12:39	9°♋58'39	30.93239 AU
opposition	-1895 Oct 31 j 12:43	23°♊10'38	-2°00'-18	retrograde	-1887 Sep 01 j 03:52	12°♋30'29	
min. Earth dist.	-1895 Oct 31 j 04:59	23°♊11'11	28.87213 AU	opposition	-1887 Nov 18 j 00:37	11°♋06'25	-1°-38'-9
direct	-1894 Jan 17 j 11:22	21°♊46'05		min. Earth dist.	-1887 Nov 18 j 01:25	11°♋06'21	28.93612 AU
				direct	-1886 Feb 04 j 08:22	9°♋41'40	
conjunction	-1894 May 02 j 07:49	24°♊16'47	-1°-51'-32				
minimum elong	-1894 May 02 j 07:49	24°♊16'47	1°51'32	conjunction	-1886 May 21 j 03:18	12°♋12'59	-1°-30'-12
max. Earth dist.	-1894 May 02 j 15:10	24°♊17'28	30.87496 AU	minimum elong	-1886 May 21 j 03:19	12°♋12'59	1°30'11
retrograde	-1894 Aug 16 j 17:34	26°♊49'37		max. Earth dist.	-1886 May 21 j 02:26	12°♋12'54	30.93832 AU
opposition	-1894 Nov 02 j 23:19	25°♊24'57	-1°-58'-8	retrograde	-1886 Sep 03 j 16:42	14°♋44'35	
min. Earth dist.	-1894 Nov 02 j 16:43	25°♊25'25	28.88045 AU	opposition	-1886 Nov 20 j 10:53	13°♋20'33	-1°-34'-41
direct	-1893 Jan 19 j 22:12	24°♊00'23		min. Earth dist.	-1886 Nov 20 j 11:46	13°♋20'30	28.94197 AU
				direct	-1885 Feb 06 j 22:51	11°♋55'45	
conjunction	-1893 May 04 j 22:07	26°♊31'11	-1°-49'-25				
minimum elong	-1893 May 04 j 22:07	26°♊31'11	1°49'26	conjunction	-1885 May 23 j 17:18	14°♋27'06	-1°-26'-54
max. Earth dist.	-1893 May 05 j 05:46	26°♊31'54	30.88388 AU	minimum elong	-1885 May 23 j 17:19	14°♋27'06	1°26'53
retrograde	-1893 Aug 19 j 05:08	29°♊03'54		max. Earth dist.	-1885 May 23 j 14:48	14°♋26'52	30.94437 AU
opposition	-1893 Nov 05 j 09:48	27°♊39'20	-1°-55'-47		-1885 Jun 07 j 14:03	15°♋	
min. Earth dist.	-1893 Nov 05 j 03:43	27°♊39'46	28.88963 AU	retrograde	-1885 Sep 06 j 04:26	16°♋58'31	
direct	-1892 Jan 22 j 10:47	26°♊14'47		opposition	-1885 Nov 22 j 21:11	15°♋34'31	-1°-31'-5

Planetary Phenomena of Neptune from -1900 through -1400 (UT), Astrodienst AG 7-Dez-2017 14:44, page 2

Attention, astronomical year style is used: The year -1885 in astronomical counting style is the year 1886 BCE in historical counting style.

min. Earth dist.	-1885 Nov 22 j 23:23	15° $\text{R}34'22''$	28.94833 AU	minimum elong	-1877 Jun 11 j 08:53	2° $\text{II}16'33''$	0°56'12
	-1885 Dec 13 j 18:02	15° $\text{R}8''$		max. Earth dist.	-1877 Jun 10 j 23:47	2° $\text{II}15'43''$	31.02116 AU
direct	-1884 Feb 09 j 10:42	14° $\text{R}09'39''$		retrograde	-1877 Sep 23 j 21:34	4° $\text{II}46'37''$	
	-1884 Apr 05 j 18:45	15° $\text{R}8''$		opposition	-1877 Dec 10 j 06:49	3° $\text{II}23'18''$	0°-57'-50
				min. Earth dist.	-1877 Dec 10 j 15:00	3° $\text{II}22'43''$	29.02596 AU
conjunction	-1884 May 25 j 07:32	16° $\text{R}41'02''$	-1°-23'-27	direct	-1876 Feb 27 j 10:18	1° $\text{II}58'16''$	
minimum elong	-1884 May 25 j 07:32	16° $\text{R}41'02''$	1°23'26				
max. Earth dist.	-1884 May 25 j 05:08	16° $\text{R}40'49''$	30.95113 AU	conjunction	-1876 Jun 12 j 22:44	4° $\text{II}30'01''$	0°-51'-57
retrograde	-1884 Sep 07 j 15:36	19° $\text{R}12'15''$		minimum elong	-1876 Jun 12 j 22:44	4° $\text{II}30'01''$	0°51'56
opposition	-1884 Nov 24 j 07:19	17° $\text{R}48'19''$	-1°-27'-20	max. Earth dist.	-1876 Jun 12 j 11:43	4° $\text{II}29'00''$	31.02989 AU
min. Earth dist.	-1884 Nov 24 j 09:58	17° $\text{R}48'07''$	28.95543 AU	retrograde	-1876 Sep 25 j 09:00	6° $\text{II}59'54''$	
direct	-1883 Feb 10 j 23:52	16° $\text{R}23'24''$		opposition	-1876 Dec 11 j 17:02	5° $\text{II}36'38''$	0°-53'-14
				min. Earth dist.	-1876 Dec 12 j 02:46	5° $\text{II}35'57''$	29.03422 AU
conjunction	-1883 May 27 j 21:32	18° $\text{R}54'49''$	-1°-19'-54	direct	-1875 Feb 28 j 22:05	4° $\text{II}11'33''$	
minimum elong	-1883 May 27 j 21:33	18° $\text{R}54'49''$	1°19'53				
max. Earth dist.	-1883 May 27 j 17:12	18° $\text{R}54'25''$	30.95887 AU	conjunction	-1875 Jun 15 j 12:34	6° $\text{II}43'20''$	0°-47'-37
retrograde	-1883 Sep 10 j 04:31	21° $\text{R}25'51''$		minimum elong	-1875 Jun 15 j 12:34	6° $\text{II}43'20''$	0°47'36
opposition	-1883 Nov 26 j 17:33	20° $\text{R}01'58''$	-1°-23'-28	max. Earth dist.	-1875 Jun 15 j 01:21	6° $\text{II}42'18''$	31.03772 AU
min. Earth dist.	-1883 Nov 26 j 20:40	20° $\text{R}01'45''$	28.96382 AU	retrograde	-1875 Sep 27 j 20:01	9° $\text{II}13'00''$	
direct	-1882 Feb 13 j 11:12	18° $\text{R}37'01''$		opposition	-1875 Dec 14 j 03:17	7° $\text{II}49'47''$	0°-48'-34
				min. Earth dist.	-1875 Dec 14 j 13:45	7° $\text{II}49'03''$	29.04156 AU
conjunction	-1882 May 30 j 11:27	21° $\text{R}08'29''$	-1°-16'-13	direct	-1874 Mar 03 j 11:46	6° $\text{II}24'40''$	
minimum elong	-1882 May 30 j 11:27	21° $\text{R}08'29''$	1°16'12				
max. Earth dist.	-1882 May 30 j 07:35	21° $\text{R}08'07''$	30.96788 AU	conjunction	-1874 Jun 18 j 01:56	8° $\text{II}56'26''$	0°-43'-13
retrograde	-1882 Sep 12 j 14:24	23° $\text{R}39'20''$		minimum elong	-1874 Jun 18 j 01:56	8° $\text{II}56'26''$	0°43'12
opposition	-1882 Nov 29 j 03:49	22° $\text{R}15'33''$	-1°-19'-28	max. Earth dist.	-1874 Jun 17 j 12:38	8° $\text{II}55'13''$	31.04486 AU
min. Earth dist.	-1882 Nov 29 j 08:00	22° $\text{R}15'15''$	28.97337 AU	retrograde	-1874 Sep 30 j 08:25	11° $\text{II}25'55''$	
direct	-1881 Feb 15 j 22:41	20° $\text{R}50'35''$		opposition	-1874 Dec 16 j 13:27	10° $\text{II}02'44''$	0°-43'-50
				min. Earth dist.	-1874 Dec 17 j 00:32	10° $\text{II}01'57''$	29.04858 AU
conjunction	-1881 Jun 02 j 01:17	23° $\text{R}22'05''$	-1°-12'-25	direct	-1873 Mar 06 j 00:01	8° $\text{II}37'33''$	
minimum elong	-1881 Jun 02 j 01:17	23° $\text{R}22'05''$	1°12'25				
max. Earth dist.	-1881 Jun 01 j 19:44	23° $\text{R}21'35''$	30.97817 AU	conjunction	-1873 Jun 20 j 15:27	11° $\text{II}09'20''$	0°-38'-45
retrograde	-1881 Sep 15 j 01:43	25° $\text{R}52'47''$		minimum elong	-1873 Jun 20 j 15:27	11° $\text{II}09'20''$	0°38'44
opposition	-1881 Dec 01 j 13:51	24° $\text{R}29'06''$	-1°-15'-21	max. Earth dist.	-1873 Jun 20 j 02:27	11° $\text{II}08'08''$	31.05180 AU
min. Earth dist.	-1881 Dec 01 j 18:01	24° $\text{R}28'48''$	28.98410 AU	retrograde	-1873 Oct 02 j 17:42	13° $\text{II}38'36''$	
direct	-1880 Feb 18 j 10:09	23° $\text{R}04'08''$		opposition	-1873 Dec 18 j 23:30	12° $\text{II}15'28''$	0°-39'-2
				min. Earth dist.	-1873 Dec 19 j 11:55	12° $\text{II}14'36''$	29.05553 AU
conjunction	-1880 Jun 03 j 15:17	25° $\text{R}35'42''$	-1°-8'-31	direct	-1872 Mar 07 j 12:27	10° $\text{II}50'14''$	
minimum elong	-1880 Jun 03 j 15:17	25° $\text{R}35'42''$	1°08'30				
max. Earth dist.	-1880 Jun 03 j 09:37	25° $\text{R}35'11''$	30.98922 AU	conjunction	-1872 Jun 22 j 04:43	13° $\text{II}22'00''$	0°-34'-15
retrograde	-1880 Sep 16 j 11:30	28° $\text{R}06'15''$		minimum elong	-1872 Jun 22 j 04:43	13° $\text{II}22'00''$	0°34'14
opposition	-1880 Dec 03 j 00:06	26° $\text{R}42'40''$	-1°-11'-8	max. Earth dist.	-1872 Jun 21 j 13:59	13° $\text{II}20'39''$	31.05903 AU
min. Earth dist.	-1880 Dec 03 j 06:02	26° $\text{R}42'15''$	28.99529 AU	retrograde	-1872 Oct 04 j 04:38	15° $\text{II}51'06''$	
direct	-1879 Feb 19 j 20:57	25° $\text{R}17'42''$		opposition	-1872 Dec 20 j 09:33	14° $\text{II}28'01''$	0°-34'-12
				min. Earth dist.	-1872 Dec 20 j 21:47	14° $\text{II}27'09''$	29.06306 AU
conjunction	-1879 Jun 06 j 05:09	27° $\text{R}49'20''$	-1°-4'-31	direct	-1871 Mar 10 j 00:25	13° $\text{II}02'44''$	
minimum elong	-1879 Jun 06 j 05:09	27° $\text{R}49'20''$	1°04'30				
max. Earth dist.	-1879 Jun 05 j 22:00	27° $\text{R}48'40''$	31.00050 AU	conjunction	-1871 Jun 24 j 17:54	15° $\text{II}34'31''$	0°-29'-42
	-1879 Aug 15 j 17:51	0° II		minimum elong	-1871 Jun 24 j 17:54	15° $\text{II}34'31''$	0°29'40
retrograde	-1879 Sep 18 j 23:33	0° $\text{II}19'43''$		max. Earth dist.	-1871 Jun 24 j 03:26	15° $\text{II}33'11''$	31.06689 AU
	-1879 Oct 23 j 15:20	30° $\text{R}8''$		retrograde	-1871 Oct 06 j 13:39	18° $\text{II}03'26''$	
opposition	-1879 Dec 05 j 10:14	28° $\text{R}56'15''$	-1°-6'-47	opposition	-1871 Dec 22 j 19:45	16° $\text{II}40'24''$	0°-29'-18
min. Earth dist.	-1879 Dec 05 j 16:07	28° $\text{R}55'50''$	29.00632 AU	min. Earth dist.	-1871 Dec 23 j 09:21	16° $\text{II}39'27''$	29.07148 AU
direct	-1878 Feb 22 j 08:43	27° $\text{R}31'17''$		direct	-1870 Mar 12 j 11:11	15° $\text{II}15'06''$	
	-1878 Jun 07 j 11:02	0° II					
conjunction	-1878 Jun 08 j 19:05	0° $\text{II}02'58''$	-1°00'-25	conjunction	-1870 Jun 27 j 06:53	17° $\text{II}46'53''$	0°-25'-6
minimum elong	-1878 Jun 08 j 19:05	0° $\text{II}02'58''$	1°00'23	minimum elong	-1870 Jun 27 j 06:53	17° $\text{II}46'53''$	0°25'05
max. Earth dist.	-1878 Jun 08 j 10:49	0° $\text{II}02'12''$	31.01121 AU	max. Earth dist.	-1870 Jun 26 j 15:24	17° $\text{II}45'27''$	31.07603 AU
retrograde	-1878 Sep 21 j 09:51	2° $\text{II}33'12''$		retrograde	-1870 Oct 09 j 00:41	20° $\text{II}15'39''$	
opposition	-1878 Dec 07 j 20:35	1° $\text{II}09'49''$	-1°-2'-22	opposition	-1870 Dec 25 j 05:45	18° $\text{II}52'42''$	0°-24'-22
min. Earth dist.	-1878 Dec 08 j 04:26	1° $\text{II}09'16''$	29.01670 AU	min. Earth dist.	-1870 Dec 25 j 18:43	18° $\text{II}51'47''$	29.08122 AU
	-1877 Jan 25 j 06:09	30° $\text{R}8''$		direct	-1869 Mar 14 j 22:21	17° $\text{II}27'22''$	
direct	-1877 Feb 24 j 20:08	29° $\text{R}44'50''$		conjunction	-1869 Jun 29 j 19:48	19° $\text{II}59'11''$	0°-20'-28
	-1877 Mar 27 j 07:22	0° II		minimum elong	-1869 Jun 29 j 19:49	19° $\text{II}59'11''$	0°20'27
				max. Earth dist.	-1869 Jun 29 j 03:58	19° $\text{II}57'44''$	31.08639 AU
conjunction	-1877 Jun 11 j 08:53	2° $\text{II}16'33''$	0°-56'-13	retrograde	-1869 Oct 11 j 10:06	22° $\text{II}27'50''$	

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Attention, astronomical year style is used: The year -1869 in astronomical counting style is the year 1870 BCE in historical counting style.

opposition	-1869 Dec 27 j 15:58	21°II04'58	0°-19'-24	conjunction	-1862 Jul 15 j 13:04	5°☾25'54	0°12'26
min. Earth dist.	-1869 Dec 28 j 06:18	21°II03'58	29.09220 AU	minimum elong	-1862 Jul 15 j 13:04	5°☾25'54	0°12'27
direct	-1868 Mar 16 j 09:24	19°II39'40		behind sun begin	-1862 Jul 15 j 08:52	5°☾25'32	
				behind sun end	-1862 Jul 15 j 17:16	5°☾26'17	
conjunction	-1868 Jul 01 j 08:47	22°II11'32	0°-15'-49	max. Earth dist.	-1862 Jul 14 j 16:26	5°☾24'00	31.16004 AU
minimum elong	-1868 Jul 01 j 08:47	22°II11'32	0°15'48	retrograde	-1862 Oct 26 j 13:57	7°☾53'37	
behind sun begin	-1868 Jul 01 j 08:40	22°II11'31		opposition	-1861 Jan 11 j 15:55	6°☾31'17	0°15'41
behind sun end	-1868 Jul 01 j 08:54	22°II11'32		min. Earth dist.	-1861 Jan 12 j 11:22	6°☾29'56	29.16402 AU
max. Earth dist.	-1868 Jun 30 j 16:40	22°II10'02	31.09790 AU	direct	-1861 Apr 01 j 23:51	5°☾06'00	
retrograde	-1868 Oct 12 j 20:59	24°II40'02		max. Earth dist.	-1861 Jul 17 j 03:33	7°☾35'53	31.16742 AU
opposition	-1868 Dec 29 j 02:00	23°II17'17	0°-14'-24				
min. Earth dist.	-1868 Dec 29 j 16:14	23°II16'17	29.10394 AU	conjunction	-1861 Jul 18 j 01:21	7°☾37'54	0°17'05
direct	-1867 Mar 18 j 22:26	21°II52'01		minimum elong	-1861 Jul 18 j 01:21	7°☾37'54	0°17'08
				retrograde	-1861 Oct 29 j 00:12	10°☾05'26	
conjunction	-1867 Jul 03 j 21:39	24°II23'55	0°-11'-8	opposition	-1860 Jan 14 j 02:12	8°☾43'08	0°20'39
minimum elong	-1867 Jul 03 j 21:39	24°II23'56	0°11'07	min. Earth dist.	-1860 Jan 14 j 21:11	8°☾41'49	29.17112 AU
behind sun begin	-1867 Jul 03 j 16:49	24°II23'30		direct	-1860 Apr 03 j 12:03	7°☾17'49	
behind sun end	-1867 Jul 04 j 02:30	24°II24'21					
max. Earth dist.	-1867 Jul 03 j 04:21	24°II22'20	31.10986 AU	conjunction	-1860 Jul 19 j 13:37	9°☾49'39	0°21'42
retrograde	-1867 Oct 15 j 08:19	26°II52'20		minimum elong	-1860 Jul 19 j 13:37	9°☾49'39	0°21'44
opposition	-1867 Dec 31 j 12:17	25°II29'41	0°-9'-23	max. Earth dist.	-1860 Jul 18 j 15:26	9°☾47'36	31.17434 AU
min. Earth dist.	-1866 Jan 01 j 03:35	25°II28'37	29.11604 AU	retrograde	-1860 Oct 30 j 08:28	12°☾17'03	
direct	-1866 Mar 21 j 09:05	24°II04'27		opposition	-1859 Jan 15 j 12:35	10°☾54'46	0°25'35
				min. Earth dist.	-1859 Jan 16 j 08:55	10°☾53'20	29.17820 AU
conjunction	-1866 Jul 06 j 10:25	26°II36'23	0°-6'-27	direct	-1859 Apr 05 j 23:11	9°☾29'24	
minimum elong	-1866 Jul 06 j 10:25	26°II36'23	0°06'26	max. Earth dist.	-1859 Jul 21 j 03:31	11°☾59'08	31.18162 AU
behind sun begin	-1866 Jul 06 j 04:14	26°II35'50					
behind sun end	-1866 Jul 06 j 16:35	26°II36'56		conjunction	-1859 Jul 22 j 01:41	12°☾01'11	0°26'18
max. Earth dist.	-1866 Jul 05 j 17:18	26°II34'49	31.12179 AU	minimum elong	-1859 Jul 22 j 01:41	12°☾01'11	0°26'20
retrograde	-1866 Oct 17 j 19:20	29°II04'41		retrograde	-1859 Nov 01 j 18:00	14°☾28'26	
opposition	-1865 Jan 02 j 22:34	27°II42'08	0°-4'-22	opposition	-1858 Jan 17 j 22:59	13°☾06'10	0°30'28
min. Earth dist.	-1865 Jan 03 j 14:31	27°II41'01	29.12761 AU	min. Earth dist.	-1858 Jan 18 j 18:54	13°☾04'46	29.18575 AU
direct	-1865 Mar 23 j 22:27	26°II16'55		direct	-1858 Apr 08 j 11:39	11°☾40'46	
conjunction	-1865 Jul 08 j 23:07	28°II48'53	0°-1'-44	conjunction	-1858 Jul 24 j 13:26	14°☾12'31	0°30'51
minimum elong	-1865 Jul 08 j 23:08	28°II48'53	0°01'43	minimum elong	-1858 Jul 24 j 13:26	14°☾12'31	0°30'52
behind sun begin	-1865 Jul 08 j 16:34	28°II48'18		max. Earth dist.	-1858 Jul 23 j 14:35	14°☾10'24	31.18953 AU
behind sun end	-1865 Jul 09 j 05:42	28°II49'28		retrograde	-1858 Nov 04 j 04:28	16°☾39'39	
max. Earth dist.	-1865 Jul 08 j 04:02	28°II47'07	31.13296 AU	opposition	-1857 Jan 20 j 09:25	15°☾17'24	0°35'18
	-1865 Aug 11 j 04:05	0°☾		min. Earth dist.	-1857 Jan 21 j 05:48	15°☾15'59	29.19431 AU
retrograde	-1865 Oct 20 j 08:09	1°☾17'03		direct	-1857 Apr 10 j 21:55	13°☾52'00	
asc. node	-1865 Nov 18 j 10:25	1°☾02'52		max. Earth dist.	-1857 Jul 26 j 03:14	16°☾21'40	31.19858 AU
	-1864 Jan 02 j 03:07	30°RII					
opposition	-1864 Jan 05 j 08:44	29°II54'34	0°00'39	conjunction	-1857 Jul 27 j 01:21	16°☾23'43	0°35'21
min. Earth dist.	-1864 Jan 06 j 01:16	29°II53'25	29.13839 AU	minimum elong	-1857 Jul 27 j 01:20	16°☾23'43	0°35'23
direct	-1864 Mar 25 j 11:07	28°II29'22		retrograde	-1857 Nov 06 j 14:22	18°☾50'45	
	-1864 Jun 12 j 03:27	0°☾		opposition	-1856 Jan 22 j 19:46	17°☾28'34	0°40'06
				min. Earth dist.	-1856 Jan 23 j 16:15	17°☾27'09	29.20381 AU
conjunction	-1864 Jul 10 j 12:01	1°☾01'21	0°03'05	direct	-1856 Apr 12 j 11:12	16°☾03'12	
minimum elong	-1864 Jul 10 j 12:01	1°☾01'21	0°03'07				
behind sun begin	-1864 Jul 10 j 05:28	1°☾00'46		conjunction	-1856 Jul 28 j 13:05	18°☾34'54	0°39'48
behind sun end	-1864 Jul 10 j 18:33	1°☾01'55		minimum elong	-1856 Jul 28 j 13:04	18°☾34'54	0°39'50
max. Earth dist.	-1864 Jul 09 j 17:05	0°☾59'36	31.14310 AU	max. Earth dist.	-1856 Jul 27 j 13:44	18°☾32'44	31.20860 AU
retrograde	-1864 Oct 21 j 17:25	3°☾29'22		retrograde	-1856 Nov 08 j 02:38	21°☾01'51	
opposition	-1863 Jan 06 j 19:13	2°☾06'58	0°05'41	opposition	-1855 Jan 24 j 06:14	19°☾39'44	0°44'49
min. Earth dist.	-1863 Jan 07 j 13:10	2°☾05'42	29.14791 AU	min. Earth dist.	-1855 Jan 25 j 02:33	19°☾38'20	29.21431 AU
direct	-1863 Mar 28 j 00:01	0°☾41'44		direct	-1855 Apr 14 j 23:08	18°☾14'24	
max. Earth dist.	-1863 Jul 12 j 03:45	3°☾11'47	31.15209 AU	max. Earth dist.	-1855 Jul 30 j 02:22	20°☾44'03	31.21927 AU
conjunction	-1863 Jul 13 j 00:30	3°☾13'42	0°07'46	conjunction	-1855 Jul 31 j 00:45	20°☾46'08	0°44'12
minimum elong	-1863 Jul 13 j 00:30	3°☾13'42	0°07'48	minimum elong	-1855 Jul 31 j 00:45	20°☾46'08	0°44'14
behind sun begin	-1863 Jul 12 j 18:36	3°☾13'11		retrograde	-1855 Nov 10 j 12:00	23°☾13'01	
behind sun end	-1863 Jul 13 j 06:23	3°☾14'14		opposition	-1854 Jan 26 j 16:54	21°☾50'59	0°49'29
retrograde	-1863 Oct 24 j 04:39	5°☾41'34		min. Earth dist.	-1854 Jan 27 j 14:11	21°☾49'31	29.22508 AU
opposition	-1862 Jan 09 j 05:32	4°☾19'13	0°10'42	direct	-1854 Apr 17 j 11:27	20°☾25'43	
min. Earth dist.	-1862 Jan 09 j 23:22	4°☾17'58	29.15640 AU				
direct	-1862 Mar 30 j 12:25	2°☾53'58		conjunction	-1854 Aug 02 j 12:18	22°☾57'27	0°48'32

Attention, astronomical year style is used: The year -1854 in astronomical counting style is the year 1855 BCE in historical counting style.

minimum elong	-1854 Aug 02 j 12:18	22° $\mathring{5}$ 7'27	0°48'34	conjunction	-1846 Aug 20 j 06:21	10° $\mathring{0}$ 27'34	1°20'05
max. Earth dist.	-1854 Aug 01 j 12:39	22° $\mathring{5}$ 5'15	31.23001 AU	minimum elong	-1846 Aug 20 j 06:21	10° $\mathring{0}$ 27'34	1°20'06
retrograde	-1854 Nov 12 j 23:40	25° $\mathring{2}$ 24'16		retrograde	-1846 Nov 30 j 06:25	12° $\mathring{0}$ 53'53	
opposition	-1853 Jan 29 j 03:22	24° $\mathring{0}$ 02'20	0°54'05	opposition	-1845 Feb 15 j 18:24	11° $\mathring{0}$ 32'06	1°27'23
min. Earth dist.	-1853 Jan 30 j 00:13	24° $\mathring{0}$ 00'54	29.23566 AU	min. Earth dist.	-1845 Feb 16 j 18:15	11° $\mathring{0}$ 30'28	29.28175 AU
direct	-1853 Apr 19 j 23:33	22° $\mathring{3}$ 7'07		direct	-1845 May 07 j 21:46	10° $\mathring{0}$ 06'56	
max. Earth dist.	-1853 Aug 04 j 00:44	25° $\mathring{0}$ 06'42	31.24007 AU				
conjunction	-1853 Aug 05 j 00:00	25° $\mathring{0}$ 08'52	0°52'48	conjunction	-1845 Aug 22 j 16:58	12° $\mathring{0}$ 38'15	1°23'34
minimum elong	-1853 Aug 05 j 00:00	25° $\mathring{0}$ 08'52	0°52'50	minimum elong	-1845 Aug 22 j 16:58	12° $\mathring{0}$ 38'15	1°23'36
retrograde	-1853 Nov 15 j 09:37	27° $\mathring{3}$ 35'38		max. Earth dist.	-1845 Aug 21 j 15:33	12° $\mathring{0}$ 35'53	31.28316 AU
opposition	-1852 Jan 31 j 14:12	26° $\mathring{1}$ 13'46	0°58'36		-1845 Nov 16 j 12:50	15° $\mathring{0}$	
min. Earth dist.	-1852 Feb 01 j 12:31	26° $\mathring{1}$ 12'14	29.24527 AU	retrograde	-1845 Dec 02 j 18:00	15° $\mathring{0}$ 04'30	
direct	-1852 Apr 21 j 11:07	24° $\mathring{4}$ 48'36			-1845 Dec 19 j 00:42	15° \mathring{R} $\mathring{0}$	
max. Earth dist.	-1852 Aug 05 j 11:15	27° $\mathring{3}$ 18'05	31.24904 AU	opposition	-1844 Feb 18 j 05:22	13° $\mathring{0}$ 42'44	1°31'02
conjunction	-1852 Aug 06 j 11:31	27° $\mathring{3}$ 20'20	0°56'59	min. Earth dist.	-1844 Feb 19 j 04:00	13° $\mathring{0}$ 41'10	29.28665 AU
minimum elong	-1852 Aug 06 j 11:31	27° $\mathring{3}$ 20'20	0°57'00	direct	-1844 May 09 j 10:48	12° $\mathring{0}$ 17'35	
retrograde	-1852 Nov 16 j 20:02	29° $\mathring{4}$ 47'02		max. Earth dist.	-1844 Aug 23 j 03:18	14° $\mathring{0}$ 46'35	31.28841 AU
opposition	-1851 Feb 02 j 00:58	28° $\mathring{2}$ 25'15	1°03'01	conjunction	-1844 Aug 24 j 03:37	14° $\mathring{0}$ 48'51	1°26'55
min. Earth dist.	-1851 Feb 02 j 22:43	28° $\mathring{2}$ 23'45	29.25356 AU	minimum elong	-1844 Aug 24 j 03:36	14° $\mathring{0}$ 48'51	1°26'56
direct	-1851 Apr 23 j 23:26	27° $\mathring{0}$ 00'06			-1844 Aug 29 j 03:14	15° $\mathring{0}$	
conjunction	-1851 Aug 08 j 23:04	29° $\mathring{3}$ 31'49	1°01'05	retrograde	-1844 Dec 04 j 04:07	17° $\mathring{0}$ 15'05	
minimum elong	-1851 Aug 08 j 23:04	29° $\mathring{3}$ 31'49	1°01'07	opposition	-1843 Feb 19 j 16:33	15° $\mathring{0}$ 53'19	1°34'32
max. Earth dist.	-1851 Aug 07 j 22:24	29° $\mathring{2}$ 29'31	31.25653 AU	min. Earth dist.	-1843 Feb 20 j 15:53	15° $\mathring{0}$ 51'43	29.29241 AU
retrograde	-1851 Aug 21 j 15:28	0° $\mathring{0}$		direct	-1843 Mar 26 j 16:37	15° \mathring{R} $\mathring{0}$	
opposition	-1851 Nov 19 j 04:47	1° $\mathring{0}$ 58'28			-1843 May 11 j 23:05	14° $\mathring{0}$ 28'13	
min. Earth dist.	-1850 Feb 04 j 11:56	0° $\mathring{0}$ 36'43	1°07'21		-1843 Jun 25 j 22:51	15° $\mathring{0}$	
direct	-1850 Feb 27 j 09:59	30° \mathring{R} $\mathring{2}$		conjunction	-1843 Aug 26 j 14:05	16° $\mathring{0}$ 59'26	1°30'08
max. Earth dist.	-1850 Apr 26 j 10:11	29° $\mathring{2}$ 11'35		minimum elong	-1843 Aug 26 j 14:05	16° $\mathring{0}$ 59'26	1°30'10
conjunction	-1850 Jun 21 j 12:42	0° $\mathring{0}$		max. Earth dist.	-1843 Aug 25 j 13:41	16° $\mathring{0}$ 57'10	31.29458 AU
minimum elong	-1850 Aug 10 j 09:34	1° $\mathring{0}$ 40'57	31.26276 AU	retrograde	-1843 Dec 06 j 14:13	19° $\mathring{0}$ 25'39	
retrograde	-1850 Aug 11 j 10:20	1° $\mathring{0}$ 43'15	1°05'05	opposition	-1842 Feb 22 j 03:37	18° $\mathring{0}$ 03'56	1°37'55
opposition	-1850 Aug 11 j 10:19	1° $\mathring{0}$ 43'15	1°05'06	min. Earth dist.	-1842 Feb 23 j 01:42	18° $\mathring{0}$ 02'25	29.29880 AU
retrograde	-1850 Nov 21 j 14:04	4° $\mathring{0}$ 09'50		direct	-1842 May 14 j 11:37	16° $\mathring{0}$ 38'53	
opposition	-1849 Feb 06 j 22:47	2° $\mathring{0}$ 48'06	1°11'35	max. Earth dist.	-1842 Aug 28 j 00:19	19° $\mathring{0}$ 07'49	31.30098 AU
min. Earth dist.	-1849 Feb 07 j 21:40	2° $\mathring{0}$ 46'31	29.26599 AU	conjunction	-1842 Aug 29 j 00:29	19° $\mathring{0}$ 10'04	1°33'14
direct	-1849 Apr 28 j 22:12	1° $\mathring{0}$ 22'58		minimum elong	-1842 Aug 29 j 00:29	19° $\mathring{0}$ 10'04	1°33'15
conjunction	-1849 Aug 13 j 21:35	3° $\mathring{0}$ 54'35	1°09'00	retrograde	-1842 Dec 08 j 23:11	21° $\mathring{0}$ 36'18	
minimum elong	-1849 Aug 13 j 21:35	3° $\mathring{0}$ 54'35	1°09'02	opposition	-1841 Feb 24 j 14:52	20° $\mathring{0}$ 14'37	1°41'09
max. Earth dist.	-1849 Aug 12 j 19:52	3° $\mathring{0}$ 52'11	31.26758 AU	min. Earth dist.	-1841 Feb 25 j 13:45	20° $\mathring{0}$ 13'03	29.30525 AU
retrograde	-1849 Nov 24 j 00:28	6° $\mathring{0}$ 21'05		direct	-1841 May 16 j 22:04	18° $\mathring{0}$ 49'38	
opposition	-1848 Feb 09 j 09:34	4° $\mathring{0}$ 59'21	1°15'42	max. Earth dist.	-1841 Aug 30 j 11:15	21° $\mathring{0}$ 18'33	31.30716 AU
min. Earth dist.	-1848 Feb 10 j 09:07	4° $\mathring{0}$ 57'44	29.27043 AU	conjunction	-1841 Aug 31 j 10:56	21° $\mathring{0}$ 20'46	1°36'11
direct	-1848 Apr 30 j 08:13	3° $\mathring{0}$ 34'13		minimum elong	-1841 Aug 31 j 10:56	21° $\mathring{0}$ 20'46	1°36'13
max. Earth dist.	-1848 Aug 14 j 07:48	6° $\mathring{0}$ 03'26	31.27155 AU	retrograde	-1841 Dec 11 j 08:23	23° $\mathring{0}$ 46'59	
conjunction	-1848 Aug 15 j 08:47	6° $\mathring{0}$ 05'45	1°12'48	opposition	-1840 Feb 27 j 02:04	22° $\mathring{0}$ 25'21	1°44'14
minimum elong	-1848 Aug 15 j 08:46	6° $\mathring{0}$ 05'45	1°12'49	min. Earth dist.	-1840 Feb 28 j 00:27	22° $\mathring{0}$ 23'49	29.31102 AU
retrograde	-1848 Nov 25 j 09:54	8° $\mathring{0}$ 32'11		direct	-1840 May 18 j 10:03	21° $\mathring{0}$ 00'25	
opposition	-1847 Feb 10 j 20:33	7° $\mathring{0}$ 10'27	1°19'43	conjunction	-1840 Sep 01 j 21:20	23° $\mathring{0}$ 31'30	1°39'01
min. Earth dist.	-1847 Feb 11 j 20:15	7° $\mathring{0}$ 08'49	29.27408 AU	minimum elong	-1840 Sep 01 j 21:20	23° $\mathring{0}$ 31'30	1°39'01
direct	-1847 May 02 j 21:50	5° $\mathring{0}$ 45'18		max. Earth dist.	-1840 Aug 31 j 21:02	23° $\mathring{0}$ 29'14	31.31242 AU
conjunction	-1847 Aug 17 j 19:30	8° $\mathring{0}$ 16'45	1°16'30	retrograde	-1840 Dec 12 j 19:08	25° $\mathring{0}$ 57'44	
minimum elong	-1847 Aug 17 j 19:29	8° $\mathring{0}$ 16'45	1°16'32	opposition	-1839 Feb 28 j 13:33	24° $\mathring{0}$ 36'07	1°47'11
max. Earth dist.	-1847 Aug 16 j 17:30	8° $\mathring{0}$ 14'20	31.27504 AU	min. Earth dist.	-1839 Mar 01 j 12:11	24° $\mathring{0}$ 34'34	29.31589 AU
retrograde	-1847 Nov 27 j 21:40	10° $\mathring{0}$ 43'07		direct	-1839 May 20 j 20:00	23° $\mathring{0}$ 11'13	
opposition	-1846 Feb 13 j 07:29	9° $\mathring{0}$ 21'21	1°23'37	max. Earth dist.	-1839 Sep 03 j 08:21	25° $\mathring{0}$ 40'04	31.31657 AU
min. Earth dist.	-1846 Feb 14 j 06:43	9° $\mathring{0}$ 19'45	29.27772 AU	conjunction	-1839 Sep 04 j 07:39	25° $\mathring{0}$ 42'15	1°41'41
direct	-1846 May 05 j 09:46	7° $\mathring{0}$ 56'11		minimum elong	-1839 Sep 04 j 07:39	25° $\mathring{0}$ 42'15	1°41'43
max. Earth dist.	-1846 Aug 19 j 05:37	10° $\mathring{0}$ 25'16	31.27874 AU	retrograde	-1839 Dec 15 j 04:17	28° $\mathring{0}$ 08'30	
				opposition	-1838 Mar 03 j 01:06	26° $\mathring{0}$ 46'52	1°49'58
				min. Earth dist.	-1838 Mar 03 j 23:50	26° $\mathring{0}$ 45'19	29.31933 AU
				direct	-1838 May 23 j 08:47	25° $\mathring{0}$ 22'01	

Attention, astronomical year style is used: The year -1838 in astronomical counting style is the year 1839 BCE in historical counting style.

conjunction	-1838 Sep 06 j 17:54	27° Ω 52'59	1°44'13	direct	-1830 Jun 10 j 06:56	12° η 45'17	
minimum elong	-1838 Sep 06 j 17:54	27° Ω 52'59	1°44'14	max. Earth dist.	-1830 Sep 23 j 05:04	15° η 13'48	31.32370 AU
max. Earth dist.	-1838 Sep 05 j 17:29	27° Ω 50'42	31.31930 AU				
	-1838 Nov 14 j 00:02	0° η		conjunction	-1830 Sep 24 j 00:19	15° η 15'36	1°58'52
retrograde	-1838 Dec 17 j 15:58	0° η 19'14		minimum elong	-1830 Sep 24 j 00:19	15° η 15'36	1°58'52
	-1837 Jan 21 j 04:36	30° \mathcal{R} Ω		retrograde	-1829 Jan 03 j 22:38	17° η 42'07	
opposition	-1837 Mar 05 j 12:26	28° Ω 57'35	1°52'36	opposition	-1829 Mar 23 j 09:48	16° η 20'17	2°07'34
min. Earth dist.	-1837 Mar 06 j 10:45	28° Ω 56'04	29.32146 AU	min. Earth dist.	-1829 Mar 24 j 04:48	16° η 19'00	29.32639 AU
direct	-1837 May 25 j 19:37	27° Ω 32'45		direct	-1829 Jun 12 j 18:43	14° η 55'45	
	-1837 Sep 07 j 13:24	0° η					
max. Earth dist.	-1837 Sep 08 j 04:53	0° η 01'27	31.32063 AU	conjunction	-1829 Sep 26 j 09:48	17° η 26'01	1°59'57
				minimum elong	-1829 Sep 26 j 09:48	17° η 26'01	1°59'59
conjunction	-1837 Sep 09 j 04:16	0° η 03'38	1°46'36	max. Earth dist.	-1829 Sep 25 j 14:02	17° η 24'09	31.32620 AU
minimum elong	-1837 Sep 09 j 04:15	0° η 03'38	1°46'38	retrograde	-1828 Jan 06 j 10:38	19° η 52'37	
retrograde	-1837 Dec 20 j 01:13	2° η 29'53		opposition	-1828 Mar 24 j 21:45	18° η 30'48	2°08'38
opposition	-1836 Mar 07 j 00:06	1° η 08'13	1°55'04	min. Earth dist.	-1828 Mar 25 j 15:43	18° η 29'35	29.32885 AU
min. Earth dist.	-1836 Mar 07 j 23:10	1° η 06'39	29.32214 AU	direct	-1828 Jun 14 j 04:15	17° η 06'20	
	-1836 Apr 24 j 10:41	30° \mathcal{R} Ω					
direct	-1836 May 27 j 07:35	29° Ω 43'24		conjunction	-1828 Sep 27 j 19:19	19° η 36'33	2°00'52
	-1836 Jun 28 j 15:25	0° η		minimum elong	-1828 Sep 27 j 19:19	19° η 36'33	2°00'52
				max. Earth dist.	-1828 Sep 27 j 01:07	19° η 34'50	31.32831 AU
conjunction	-1836 Sep 10 j 14:14	2° η 14'11	1°48'50	retrograde	-1827 Jan 07 j 20:25	22° η 03'16	
minimum elong	-1836 Sep 10 j 14:14	2° η 14'11	1°48'51	opposition	-1827 Mar 27 j 09:58	20° η 41'27	2°09'31
max. Earth dist.	-1836 Sep 09 j 14:11	2° η 11'56	31.32079 AU	min. Earth dist.	-1827 Mar 28 j 04:19	20° η 40'12	29.33059 AU
retrograde	-1836 Dec 21 j 12:51	4° η 40'26		direct	-1827 Jun 16 j 15:17	19° η 17'04	
opposition	-1835 Mar 09 j 11:39	3° η 18'44	1°57'22	max. Earth dist.	-1827 Sep 29 j 10:15	21° η 45'28	31.32965 AU
min. Earth dist.	-1835 Mar 10 j 09:34	3° η 17'14	29.32188 AU				
direct	-1835 May 29 j 20:44	1° η 53'54		conjunction	-1827 Sep 30 j 04:48	21° η 47'12	2°01'37
max. Earth dist.	-1835 Sep 12 j 01:15	4° η 22'27	31.32014 AU	minimum elong	-1827 Sep 30 j 04:48	21° η 47'12	2°01'38
				retrograde	-1826 Jan 10 j 08:57	24° η 14'00	
conjunction	-1835 Sep 13 j 00:16	4° η 24'36	1°50'55	opposition	-1826 Mar 29 j 22:00	22° η 52'11	2°10'14
minimum elong	-1835 Sep 13 j 00:15	4° η 24'36	1°50'57	min. Earth dist.	-1826 Mar 30 j 15:02	22° η 51'01	29.33140 AU
retrograde	-1835 Dec 23 j 23:07	6° η 50'52		direct	-1826 Jun 19 j 03:55	21° η 27'51	
opposition	-1834 Mar 11 j 23:19	5° η 29'06	1°59'30				
min. Earth dist.	-1834 Mar 12 j 21:54	5° η 27'33	29.32118 AU	conjunction	-1826 Oct 02 j 14:22	23° η 57'56	2°02'11
direct	-1834 Jun 01 j 09:10	4° η 04'17		minimum elong	-1826 Oct 02 j 14:22	23° η 57'56	2°02'11
max. Earth dist.	-1834 Sep 14 j 11:11	6° η 32'45	31.31946 AU	max. Earth dist.	-1826 Oct 01 j 20:43	23° η 56'17	31.32972 AU
				retrograde	-1825 Jan 12 j 20:17	26° η 24'49	
conjunction	-1834 Sep 15 j 09:58	6° η 34'53	1°52'50	opposition	-1825 Apr 01 j 10:19	25° η 02'57	2°10'45
minimum elong	-1834 Sep 15 j 09:58	6° η 34'53	1°52'50	min. Earth dist.	-1825 Apr 02 j 04:01	25° η 01'45	29.33080 AU
retrograde	-1834 Dec 26 j 08:56	9° η 01'09		direct	-1825 Jun 21 j 15:50	23° η 38'41	
opposition	-1833 Mar 14 j 10:51	7° η 39'20	2°01'28				
min. Earth dist.	-1833 Mar 15 j 07:53	7° η 37'54	29.32060 AU	conjunction	-1825 Oct 04 j 23:50	26° η 08'40	2°02'35
direct	-1833 Jun 03 j 22:10	6° η 14'32		minimum elong	-1825 Oct 04 j 23:50	26° η 08'40	2°02'36
				max. Earth dist.	-1825 Oct 04 j 06:22	26° η 07'02	31.32843 AU
conjunction	-1833 Sep 17 j 19:39	8° η 45'03	1°54'35	retrograde	-1824 Jan 15 j 06:39	28° η 35'37	
minimum elong	-1833 Sep 17 j 19:39	8° η 45'03	1°54'36	opposition	-1824 Apr 02 j 22:31	27° η 13'43	2°11'05
max. Earth dist.	-1833 Sep 16 j 21:24	8° η 42'58	31.31907 AU	min. Earth dist.	-1824 Apr 03 j 14:49	27° η 12'37	29.32870 AU
retrograde	-1833 Dec 28 j 17:53	11° η 11'21		direct	-1824 Jun 23 j 04:51	25° η 49'28	
opposition	-1832 Mar 15 j 22:31	9° η 49'31	2°03'15				
min. Earth dist.	-1832 Mar 16 j 19:43	9° η 48'04	29.32076 AU	conjunction	-1824 Oct 06 j 09:18	28° η 19'21	2°02'49
direct	-1832 Jun 05 j 09:03	8° η 24'45		minimum elong	-1824 Oct 06 j 09:18	28° η 19'21	2°02'48
max. Earth dist.	-1832 Sep 18 j 08:18	10° η 53'13	31.31974 AU	max. Earth dist.	-1824 Oct 05 j 16:00	28° η 17'44	31.32564 AU
					-1824 Nov 24 j 08:51	0° Ω	
conjunction	-1832 Sep 19 j 05:18	10° η 55'11	1°56'11	retrograde	-1823 Jan 16 j 16:54	0° Ω 46'22	
minimum elong	-1832 Sep 19 j 05:18	10° η 55'11	1°56'11		-1823 Mar 13 j 18:19	30° \mathcal{R} η	
retrograde	-1832 Dec 30 j 02:54	13° η 21'31		opposition	-1823 Apr 05 j 10:57	29° η 24'24	2°11'14
opposition	-1831 Mar 18 j 10:17	11° η 59'41	2°04'52	min. Earth dist.	-1823 Apr 06 j 03:35	29° η 23'16	29.32540 AU
min. Earth dist.	-1831 Mar 19 j 06:10	11° η 58'20	29.32186 AU	direct	-1823 Jun 25 j 16:42	28° η 00'10	
direct	-1831 Jun 07 j 21:11	10° η 34'58			-1823 Sep 25 j 10:22	0° Ω	
conjunction	-1831 Sep 21 j 14:42	13° η 05'20	1°57'37	conjunction	-1823 Oct 08 j 18:36	0° Ω 29'56	2°02'52
minimum elong	-1831 Sep 21 j 14:42	13° η 05'20	1°57'37	minimum elong	-1823 Oct 08 j 18:36	0° Ω 29'56	2°02'52
max. Earth dist.	-1831 Sep 20 j 17:46	13° η 03'22	31.32134 AU	max. Earth dist.	-1823 Oct 08 j 02:30	0° Ω 28'25	31.32186 AU
retrograde	-1830 Jan 01 j 13:42	15° η 31'46		retrograde	-1822 Jan 19 j 02:21	2° Ω 56'59	
opposition	-1830 Mar 20 j 22:04	14° η 09'55	2°06'18	opposition	-1822 Apr 07 j 23:16	1° Ω 34'57	2°11'12
min. Earth dist.	-1830 Mar 21 j 17:27	14° η 08'36	29.32396 AU	min. Earth dist.	-1822 Apr 08 j 14:49	1° Ω 33'53	29.32108 AU

Attention, astronomical year style is used: The year -1822 in astronomical counting style is the year 1823 BCE in historical counting style.

direct	-1822 Jun 28 j 06:17	0° 2 10'44		minimum elong	-1814 Oct 28 j 04:44	20° 2 04'09	1°55'28
max. Earth dist.	-1822 Oct 10 j 11:35	2° 2 38'50	31.31734 AU	max. Earth dist.	-1814 Oct 27 j 20:23	20° 2 03'22	31.29384 AU
				retrograde	-1813 Feb 08 j 04:20	22° 2 32'17	
conjunction	-1822 Oct 11 j 03:48	2° 2 40'22	2°02'45	opposition	-1813 Apr 28 j 16:01	21° 2 09'54	2°02'30
minimum elong	-1822 Oct 11 j 03:48	2° 2 40'22	2°02'44	min. Earth dist.	-1813 Apr 29 j 00:06	21° 2 09'22	29.29273 AU
retrograde	-1821 Jan 21 j 12:49	5° 2 07'29		direct	-1813 Jul 18 j 13:21	19° 2 46'16	
opposition	-1821 Apr 10 j 11:28	3° 2 45'21	2°10'59				
min. Earth dist.	-1821 Apr 11 j 02:31	3° 2 44'20	29.31656 AU	conjunction	-1813 Oct 30 j 13:56	22° 2 15'15	1°53'49
direct	-1821 Jun 30 j 16:51	2° 2 21'08		minimum elong	-1813 Oct 30 j 13:56	22° 2 15'15	1°53'48
				max. Earth dist.	-1813 Oct 30 j 05:15	22° 2 14'25	31.28883 AU
conjunction	-1821 Oct 13 j 13:05	4° 2 50'39	2°02'27	retrograde	-1812 Feb 10 j 15:55	24° 2 43'32	
minimum elong	-1821 Oct 13 j 13:05	4° 2 50'39	2°02'27	opposition	-1812 Apr 30 j 05:00	23° 2 21'06	2°00'38
max. Earth dist.	-1821 Oct 12 j 22:47	4° 2 49'19	31.31286 AU	min. Earth dist.	-1812 Apr 30 j 12:40	23° 2 20'35	29.28701 AU
retrograde	-1820 Jan 23 j 21:13	7° 2 17'50		direct	-1812 Jul 19 j 23:56	21° 2 57'31	
opposition	-1820 Apr 11 j 23:55	5° 2 55'39	2°10'34				
min. Earth dist.	-1820 Apr 12 j 14:10	5° 2 54'41	29.31224 AU	conjunction	-1812 Oct 31 j 23:12	24° 2 26'25	1°51'59
direct	-1820 Jul 02 j 05:13	4° 2 31'27		minimum elong	-1812 Oct 31 j 23:12	24° 2 26'25	1°51'57
				max. Earth dist.	-1812 Oct 31 j 16:10	24° 2 25'45	31.28235 AU
conjunction	-1820 Oct 14 j 22:01	7° 2 00'52	2°01'59	retrograde	-1811 Feb 12 j 00:45	26° 2 54'50	
minimum elong	-1820 Oct 14 j 22:01	7° 2 00'52	2°01'58	opposition	-1811 May 02 j 18:01	25° 2 32'20	1°58'35
max. Earth dist.	-1820 Oct 14 j 07:41	6° 2 59'30	31.30896 AU	min. Earth dist.	-1811 May 03 j 01:12	25° 2 31'51	29.27967 AU
retrograde	-1819 Jan 25 j 08:47	9° 2 28'09		direct	-1811 Jul 22 j 12:40	24° 2 08'46	
opposition	-1819 Apr 14 j 12:21	8° 2 05'53	2°09'59				
min. Earth dist.	-1819 Apr 15 j 00:58	8° 2 05'02	29.30881 AU	conjunction	-1811 Nov 03 j 08:22	26° 2 37'34	1°49'59
direct	-1819 Jul 04 j 14:58	6° 2 41'44		minimum elong	-1811 Nov 03 j 08:23	26° 2 37'34	1°49'59
				max. Earth dist.	-1811 Nov 03 j 00:55	26° 2 36'52	31.27446 AU
conjunction	-1819 Oct 17 j 07:14	9° 2 11'03	2°01'20	retrograde	-1810 Feb 14 j 12:38	29° 2 06'07	
minimum elong	-1819 Oct 17 j 07:14	9° 2 11'03	2°01'20	opposition	-1810 May 05 j 06:46	27° 2 43'32	1°56'22
max. Earth dist.	-1819 Oct 16 j 18:49	9° 2 09'53	31.30594 AU	min. Earth dist.	-1810 May 05 j 12:45	27° 2 43'07	29.27119 AU
retrograde	-1818 Jan 27 j 18:35	11° 2 38'28		direct	-1810 Jul 24 j 22:46	26° 2 19'58	
opposition	-1818 Apr 17 j 00:46	10° 2 16'10	2°09'12				
min. Earth dist.	-1818 Apr 17 j 13:14	10° 2 15'19	29.30618 AU	conjunction	-1810 Nov 05 j 17:36	28° 2 48'40	1°47'50
direct	-1818 Jul 07 j 01:54	8° 2 52'05		minimum elong	-1810 Nov 05 j 17:37	28° 2 48'40	1°47'48
				max. Earth dist.	-1810 Nov 05 j 11:45	28° 2 48'06	31.26551 AU
conjunction	-1818 Oct 19 j 16:14	11° 2 21'20	2°00'31		-1810 Dec 08 j 11:18	0° 2 00'00	
minimum elong	-1818 Oct 19 j 16:14	11° 2 21'20	2°00'30	retrograde	-1809 Feb 16 j 22:25	1° 2 00'17'20	
max. Earth dist.	-1818 Oct 19 j 04:06	11° 2 20'12	31.30377 AU		-1809 May 04 j 12:02	30° 2 00'00	
retrograde	-1817 Jan 30 j 07:05	13° 2 48'52		opposition	-1809 May 07 j 19:45	29° 2 54'38	1°53'59
opposition	-1817 Apr 19 j 13:10	12° 2 26'33	2°08'14	min. Earth dist.	-1809 May 08 j 01:43	29° 2 54'14	29.26188 AU
min. Earth dist.	-1817 Apr 19 j 23:45	12° 2 25'51	29.30417 AU	direct	-1809 Jul 27 j 10:27	28° 2 31'05	
direct	-1817 Jul 09 j 13:22	11° 2 02'34			-1809 Oct 12 j 01:29	0° 2 00'00	
conjunction	-1817 Oct 22 j 01:19	13° 2 31'46	1°59'31	conjunction	-1809 Nov 08 j 02:33	0° 2 05'39	1°45'32
minimum elong	-1817 Oct 22 j 01:19	13° 2 31'46	1°59'31	minimum elong	-1809 Nov 08 j 02:33	0° 2 05'39	1°45'31
max. Earth dist.	-1817 Oct 21 j 14:30	13° 2 30'45	31.30185 AU	max. Earth dist.	-1809 Nov 07 j 21:10	0° 2 05'08	31.25622 AU
retrograde	-1816 Feb 01 j 18:50	15° 2 59'27		retrograde	-1808 Feb 19 j 10:35	3° 2 08'26	
opposition	-1816 Apr 21 j 01:51	14° 2 37'07	2°07'04	opposition	-1808 May 09 j 08:37	2° 2 05'38	1°51'27
min. Earth dist.	-1816 Apr 21 j 12:38	14° 2 36'24	29.30229 AU	min. Earth dist.	-1808 May 09 j 12:35	2° 2 05'22	29.25260 AU
direct	-1816 Jul 11 j 00:10	13° 2 13'14		direct	-1808 Jul 28 j 21:46	0° 2 04'20'5	
conjunction	-1816 Oct 23 j 10:24	15° 2 42'23	1°58'21	conjunction	-1808 Nov 09 j 11:37	3° 2 00'33	1°43'04
minimum elong	-1816 Oct 23 j 10:24	15° 2 42'23	1°58'20	minimum elong	-1808 Nov 09 j 11:38	3° 2 00'33	1°43'03
max. Earth dist.	-1816 Oct 23 j 00:25	15° 2 41'26	31.29997 AU	max. Earth dist.	-1808 Nov 09 j 07:35	3° 2 00'10	31.24715 AU
retrograde	-1815 Feb 03 j 06:08	18° 2 10'13		retrograde	-1807 Feb 20 j 22:11	5° 2 03'28	
opposition	-1815 Apr 23 j 14:29	16° 2 47'53	2°05'44	opposition	-1807 May 11 j 21:37	4° 2 00'34	1°48'45
min. Earth dist.	-1815 Apr 23 j 23:28	16° 2 47'16	29.30008 AU	min. Earth dist.	-1807 May 12 j 01:27	4° 2 00'18	29.24394 AU
direct	-1815 Jul 13 j 12:25	15° 2 24'04		direct	-1807 Jul 31 j 07:44	2° 2 05'30'2	
conjunction	-1815 Oct 25 j 19:27	17° 2 53'11	1°57'00	conjunction	-1807 Nov 11 j 20:38	5° 2 02'25	1°40'28
minimum elong	-1815 Oct 25 j 19:27	17° 2 53'11	1°57'00	minimum elong	-1807 Nov 11 j 20:39	5° 2 02'25	1°40'27
max. Earth dist.	-1815 Oct 25 j 09:47	17° 2 52'16	31.29740 AU	max. Earth dist.	-1807 Nov 11 j 17:52	5° 2 02'09	31.23902 AU
retrograde	-1814 Feb 05 j 17:44	20° 2 21'11		retrograde	-1806 Feb 23 j 09:41	7° 2 05'27	
opposition	-1814 Apr 26 j 03:20	18° 2 58'49	2°04'12	opposition	-1806 May 14 j 10:26	6° 2 07'29	1°45'53
min. Earth dist.	-1814 Apr 26 j 12:28	18° 2 58'12	29.29708 AU	min. Earth dist.	-1806 May 14 j 12:02	6° 2 07'22	29.23613 AU
direct	-1814 Jul 15 j 23:55	17° 2 35'06		direct	-1806 Aug 02 j 20:01	5° 2 00'35'9	
conjunction	-1814 Oct 28 j 04:44	20° 2 04'09	1°55'30	conjunction	-1806 Nov 14 j 05:39	7° 2 00'32'18	1°37'43

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Attention, astronomical year style is used: The year -1806 in astronomical counting style is the year 1807 BCE in historical counting style.

minimum elong	-1806 Nov 14 j 05:39	7°M32'18	1°37'41	minimum elong	-1798 Dec 01 j 08:11	25°M03'25	1°10'52
max. Earth dist.	-1806 Nov 14 j 03:25	7°M32'05	31.23166 AU	max. Earth dist.	-1798 Dec 01 j 13:06	25°M03'53	31.16879 AU
retrograde	-1805 Feb 25 j 22:11	10°M01'29		retrograde	-1797 Mar 15 j 19:07	27°M33'54	
opposition	-1805 May 16 j 23:20	8°M38'27	1°42'52	opposition	-1797 Jun 04 j 08:09	26°M10'23	1°13'42
min. Earth dist.	-1805 May 17 j 00:38	8°M38'22	29.22920 AU	min. Earth dist.	-1797 Jun 04 j 02:14	26°M10'47	29.16337 AU
direct	-1805 Aug 05 j 07:22	7°M15'00		direct	-1797 Aug 23 j 02:50	24°M47'14	
conjunction	-1805 Nov 16 j 14:49	9°M43'16	1°34'49	conjunction	-1797 Dec 03 j 17:34	27°M15'03	1°07'02
minimum elong	-1805 Nov 16 j 14:49	9°M43'16	1°34'49	minimum elong	-1797 Dec 03 j 17:35	27°M15'03	1°07'01
max. Earth dist.	-1805 Nov 16 j 14:32	9°M43'14	31.22517 AU	max. Earth dist.	-1797 Dec 03 j 22:45	27°M15'32	31.15711 AU
retrograde	-1804 Feb 28 j 09:44	12°M12'36		retrograde	-1796 Mar 17 j 08:22	29°M45'40	
opposition	-1804 May 18 j 12:20	10°M49'31	1°39'42	opposition	-1796 Jun 05 j 21:24	28°M22'02	1°09'31
min. Earth dist.	-1804 May 18 j 12:01	10°M49'33	29.22283 AU	min. Earth dist.	-1796 Jun 05 j 15:20	28°M22'26	29.15176 AU
direct	-1804 Aug 06 j 20:32	9°M26'09		direct	-1796 Aug 24 j 14:01	26°M58'53	
conjunction	-1804 Nov 17 j 23:47	11°M54'21	1°31'47	conjunction	-1796 Dec 05 j 03:01	29°M26'38	1°03'05
minimum elong	-1804 Nov 17 j 23:47	11°M54'21	1°31'45	minimum elong	-1796 Dec 05 j 03:01	29°M26'38	1°03'02
max. Earth dist.	-1804 Nov 17 j 23:37	11°M54'20	31.21906 AU	max. Earth dist.	-1796 Dec 05 j 10:13	29°M27'18	31.14572 AU
retrograde	-1803 Mar 01 j 21:43	14°M23'52			-1796 Dec 19 j 21:23	0°Z	
opposition	-1803 May 21 j 01:26	13°M00'44	1°36'23	retrograde	-1795 Mar 19 j 20:21	1°Z57'23	
min. Earth dist.	-1803 May 21 j 00:23	13°M00'49	29.21677 AU	opposition	-1795 Jun 08 j 10:29	0°Z33'39	1°05'13
direct	-1803 Aug 09 j 06:46	11°M37'25		min. Earth dist.	-1795 Jun 08 j 02:46	0°Z34'10	29.14060 AU
conjunction	-1803 Nov 20 j 09:07	14°M05'35	1°28'37		-1795 Jun 29 j 17:41	30°RM	
minimum elong	-1803 Nov 20 j 09:07	14°M05'35	1°28'36	direct	-1795 Aug 27 j 03:05	29°M10'31	
max. Earth dist.	-1803 Nov 20 j 10:54	14°M05'45	31.21291 AU		-1795 Oct 21 j 08:07	0°Z	
	-1803 Dec 14 j 20:20	15°M		conjunction	-1795 Dec 07 j 12:27	1°Z38'12	0°59'01
retrograde	-1802 Mar 04 j 07:29	16°M35'16		minimum elong	-1795 Dec 07 j 12:27	1°Z38'12	0°59'00
opposition	-1802 May 23 j 14:22	15°M12'06	1°32'55	max. Earth dist.	-1795 Dec 07 j 19:44	1°Z38'53	31.13506 AU
min. Earth dist.	-1802 May 23 j 12:42	15°M12'13	29.21034 AU	retrograde	-1794 Mar 22 j 08:44	4°Z09'07	
	-1802 May 31 j 02:23	15°RM		opposition	-1794 Jun 10 j 23:25	2°Z45'18	1°00'50
direct	-1802 Aug 11 j 19:35	13°M48'51		min. Earth dist.	-1794 Jun 10 j 14:53	2°Z45'53	29.13052 AU
	-1802 Oct 18 j 04:17	15°M		direct	-1794 Aug 29 j 13:14	1°Z22'11	
conjunction	-1802 Nov 22 j 18:23	16°M16'58	1°25'19	conjunction	-1794 Dec 09 j 22:04	3°Z49'51	0°54'53
minimum elong	-1802 Nov 22 j 18:23	16°M16'58	1°25'17	minimum elong	-1794 Dec 09 j 22:04	3°Z49'51	0°54'50
max. Earth dist.	-1802 Nov 22 j 19:54	16°M17'07	31.20629 AU	max. Earth dist.	-1794 Dec 10 j 07:29	3°Z50'44	31.12551 AU
retrograde	-1801 Mar 06 j 20:22	18°M46'49		retrograde	-1793 Mar 24 j 19:17	6°Z20'54	
opposition	-1801 May 26 j 03:28	17°M23'37	1°29'19	opposition	-1793 Jun 13 j 12:30	4°Z57'03	0°56'22
min. Earth dist.	-1801 May 26 j 00:30	17°M23'49	29.20328 AU	min. Earth dist.	-1793 Jun 13 j 02:54	4°Z57'42	29.12146 AU
direct	-1801 Aug 14 j 06:05	16°M00'25		direct	-1793 Sep 01 j 02:23	3°Z33'58	
conjunction	-1801 Nov 25 j 03:44	18°M28'29	1°21'53	conjunction	-1793 Dec 12 j 07:27	6°Z01'36	0°50'39
minimum elong	-1801 Nov 25 j 03:44	18°M28'29	1°21'52	minimum elong	-1793 Dec 12 j 07:27	6°Z01'36	0°50'38
max. Earth dist.	-1801 Nov 25 j 06:44	18°M28'46	31.19866 AU	max. Earth dist.	-1793 Dec 12 j 17:03	6°Z02'31	31.11714 AU
retrograde	-1800 Mar 08 j 06:38	20°M58'31		retrograde	-1792 Mar 26 j 09:02	8°Z32'51	
opposition	-1800 May 27 j 16:45	19°M35'15	1°25'36	opposition	-1792 Jun 15 j 01:36	7°Z08'56	0°51'48
min. Earth dist.	-1800 May 27 j 13:53	19°M35'27	29.19505 AU	min. Earth dist.	-1792 Jun 14 j 14:23	7°Z09'42	29.11357 AU
direct	-1800 Aug 15 j 17:39	18°M12'06		direct	-1792 Sep 02 j 13:08	5°Z45'55	
conjunction	-1800 Nov 26 j 13:12	20°M40'06	1°18'20	conjunction	-1792 Dec 13 j 17:10	8°Z13'32	0°46'21
minimum elong	-1800 Nov 26 j 13:13	20°M40'06	1°18'18	minimum elong	-1792 Dec 13 j 17:10	8°Z13'32	0°46'19
max. Earth dist.	-1800 Nov 26 j 16:26	20°M40'24	31.18996 AU	max. Earth dist.	-1792 Dec 14 j 04:29	8°Z14'37	31.10961 AU
retrograde	-1799 Mar 10 j 19:12	23°M10'17		retrograde	-1791 Mar 28 j 19:16	10°Z44'58	
opposition	-1799 May 30 j 05:52	21°M46'57	1°21'44	opposition	-1791 Jun 17 j 14:41	9°Z21'02	0°47'09
min. Earth dist.	-1799 May 30 j 01:23	21°M47'15	29.18563 AU	min. Earth dist.	-1791 Jun 17 j 03:19	9°Z21'48	29.10636 AU
direct	-1799 Aug 18 j 04:30	20°M23'49		direct	-1791 Sep 05 j 00:21	7°Z58'04	
conjunction	-1799 Nov 28 j 22:42	22°M51'46	1°14'40	conjunction	-1791 Dec 16 j 02:55	10°Z25'40	0°41'58
minimum elong	-1799 Nov 28 j 22:42	22°M51'46	1°14'39	minimum elong	-1791 Dec 16 j 02:55	10°Z25'40	0°41'56
max. Earth dist.	-1799 Nov 29 j 02:37	22°M52'08	31.17987 AU	max. Earth dist.	-1791 Dec 16 j 14:50	10°Z26'48	31.10273 AU
retrograde	-1798 Mar 13 j 07:01	25°M22'07		retrograde	-1790 Mar 31 j 07:44	12°Z57'18	
opposition	-1798 Jun 01 j 19:08	23°M58'41	1°17'46	opposition	-1790 Jun 20 j 03:43	11°Z33'20	0°42'26
min. Earth dist.	-1798 Jun 01 j 15:02	23°M58'57	29.17493 AU	min. Earth dist.	-1790 Jun 19 j 14:38	11°Z34'13	29.09948 AU
direct	-1798 Aug 20 j 14:25	22°M35'33		direct	-1790 Sep 07 j 10:48	10°Z10'25	
conjunction	-1798 Dec 01 j 08:11	25°M03'25	1°10'54	conjunction	-1790 Dec 18 j 12:43	12°Z38'02	0°37'31

Attention, astronomical year style is used: The year -1790 in astronomical counting style is the year 1791 BCE in historical counting style.

minimum elong	-1790 Dec 18 j 12:44	12° \mathcal{A} 38'02	0°37'28	opposition	-1782 Jul 08 j 12:43	29° \mathcal{A} 15'12	0°02'54
max. Earth dist.	-1790 Dec 19 j 01:25	12° \mathcal{A} 39'14	31.09573 AU	min. Earth dist.	-1782 Jul 07 j 19:43	29° \mathcal{A} 16'22	29.02054 AU
retrograde	-1789 Apr 02 j 19:47	15° \mathcal{A} 09'50		direct	-1782 Sep 25 j 06:18	27° \mathcal{A} 52'16	
opposition	-1789 Jun 22 j 16:57	13° \mathcal{A} 45'50	0°37'38		-1782 Dec 27 j 07:09	0° \mathcal{B}	
min. Earth dist.	-1789 Jun 22 j 04:14	13° \mathcal{A} 46'42	29.09236 AU				
direct	-1789 Sep 09 j 19:57	12° \mathcal{A} 22'59		conjunction	-1781 Jan 04 j 23:02	0° \mathcal{B} 19'41	0°00'25
				minimum elong	-1781 Jan 04 j 23:03	0° \mathcal{B} 19'41	0°00'22
conjunction	-1789 Dec 20 j 22:49	14° \mathcal{A} 50'35	0°33'00	behind sun begin	-1781 Jan 04 j 16:40	0° \mathcal{B} 19'06	
minimum elong	-1789 Dec 20 j 22:49	14° \mathcal{A} 50'35	0°32'58	behind sun end	-1781 Jan 05 j 05:26	0° \mathcal{B} 20'15	
max. Earth dist.	-1789 Dec 21 j 12:33	14° \mathcal{A} 51'53	31.08843 AU	max. Earth dist.	-1781 Jan 05 j 16:59	0° \mathcal{B} 21'22	31.01538 AU
retrograde	-1788 Apr 04 j 08:51	17° \mathcal{A} 22'34		desc. node	-1781 Feb 05 j 08:49	1° \mathcal{B} 28'38	
opposition	-1788 Jun 24 j 06:06	15° \mathcal{A} 58'32	0°32'47	retrograde	-1781 Apr 21 j 02:16	2° \mathcal{B} 52'32	
min. Earth dist.	-1788 Jun 23 j 15:45	15° \mathcal{A} 59'30	29.08461 AU	min. Earth dist.	-1781 Jul 10 j 06:49	1° \mathcal{B} 29'11	29.01080 AU
direct	-1788 Sep 11 j 08:00	14° \mathcal{A} 35'42		opposition	-1781 Jul 11 j 01:36	1° \mathcal{B} 27'54	0°-2'-7
				direct	-1781 Sep 27 j 17:30	0° \mathcal{B} 04'58	
conjunction	-1788 Dec 22 j 08:54	17° \mathcal{A} 03'18	0°28'26				
minimum elong	-1788 Dec 22 j 08:54	17° \mathcal{A} 03'18	0°28'24	conjunction	-1780 Jan 07 j 09:35	2° \mathcal{B} 32'23	0°-4'-22
max. Earth dist.	-1788 Dec 22 j 22:24	17° \mathcal{A} 04'34	31.08017 AU	minimum elong	-1780 Jan 07 j 09:35	2° \mathcal{B} 32'23	0°04'25
retrograde	-1787 Apr 06 j 22:52	19° \mathcal{A} 35'27		behind sun begin	-1780 Jan 07 j 03:16	2° \mathcal{B} 31'49	
opposition	-1787 Jun 26 j 19:26	18° \mathcal{A} 11'21	0°27'53	behind sun end	-1780 Jan 07 j 15:54	2° \mathcal{B} 32'57	
min. Earth dist.	-1787 Jun 26 j 05:27	18° \mathcal{A} 12'18	29.07582 AU	max. Earth dist.	-1780 Jan 08 j 04:17	2° \mathcal{B} 34'09	31.00614 AU
direct	-1787 Sep 13 j 18:18	16° \mathcal{A} 48'32		retrograde	-1780 Apr 22 j 14:22	5° \mathcal{B} 05'24	
				opposition	-1780 Jul 12 j 14:38	3° \mathcal{B} 40'42	0°-7'-10
conjunction	-1787 Dec 24 j 19:20	19° \mathcal{A} 16'06	0°23'50	min. Earth dist.	-1780 Jul 11 j 20:05	3° \mathcal{B} 41'59	29.00222 AU
minimum elong	-1787 Dec 24 j 19:20	19° \mathcal{A} 16'06	0°23'49	direct	-1780 Sep 29 j 03:04	2° \mathcal{B} 17'47	
max. Earth dist.	-1787 Dec 25 j 10:13	19° \mathcal{A} 17'31	31.07074 AU				
retrograde	-1786 Apr 09 j 11:22	21° \mathcal{A} 48'23		conjunction	-1779 Jan 08 j 20:16	4° \mathcal{B} 45'13	0°-9'-4
opposition	-1786 Jun 29 j 08:26	20° \mathcal{A} 24'13	0°22'56	minimum elong	-1779 Jan 08 j 20:16	4° \mathcal{B} 45'13	0°09'08
min. Earth dist.	-1786 Jun 28 j 17:26	20° \mathcal{A} 25'14	29.06566 AU	behind sun begin	-1779 Jan 08 j 14:47	4° \mathcal{B} 44'44	
direct	-1786 Sep 16 j 06:41	19° \mathcal{A} 01'23		behind sun end	-1779 Jan 09 j 01:45	4° \mathcal{B} 45'43	
				max. Earth dist.	-1779 Jan 09 j 16:14	4° \mathcal{B} 47'07	30.99813 AU
conjunction	-1786 Dec 27 j 05:35	21° \mathcal{A} 28'56	0°19'12	retrograde	-1779 Apr 25 j 03:15	7° \mathcal{B} 18'23	
minimum elong	-1786 Dec 27 j 05:35	21° \mathcal{A} 28'56	0°19'10	min. Earth dist.	-1779 Jul 14 j 07:11	5° \mathcal{B} 55'04	28.99460 AU
max. Earth dist.	-1786 Dec 27 j 19:55	21° \mathcal{A} 30'17	31.06008 AU	opposition	-1779 Jul 15 j 03:28	5° \mathcal{B} 53'41	0°-12'-12
retrograde	-1785 Apr 12 j 00:59	24° \mathcal{A} 01'20		direct	-1779 Oct 01 j 14:46	4° \mathcal{B} 30'47	
opposition	-1785 Jul 01 j 21:40	22° \mathcal{A} 37'04	0°17'58				
min. Earth dist.	-1785 Jul 01 j 06:28	22° \mathcal{A} 38'06	29.05456 AU	conjunction	-1778 Jan 11 j 07:00	6° \mathcal{B} 58'16	0°-13'-45
direct	-1785 Sep 18 j 17:26	21° \mathcal{A} 14'13		minimum elong	-1778 Jan 11 j 06:59	6° \mathcal{B} 58'16	0°13'48
				behind sun begin	-1778 Jan 11 j 03:31	6° \mathcal{B} 57'57	
conjunction	-1785 Dec 29 j 15:54	23° \mathcal{A} 41'43	0°14'32	behind sun end	-1778 Jan 11 j 10:27	6° \mathcal{B} 58'35	
minimum elong	-1785 Dec 29 j 15:54	23° \mathcal{A} 41'43	0°14'31	max. Earth dist.	-1778 Jan 12 j 02:50	7° \mathcal{B} 00'08	30.99083 AU
behind sun begin	-1785 Dec 29 j 12:57	23° \mathcal{A} 41'26		retrograde	-1778 Apr 27 j 16:54	9° \mathcal{B} 31'35	
behind sun end	-1785 Dec 29 j 18:51	23° \mathcal{A} 41'59		opposition	-1778 Jul 17 j 16:21	8° \mathcal{B} 06'52	0°-17'-14
max. Earth dist.	-1785 Dec 30 j 07:55	23° \mathcal{A} 43'13	31.04860 AU	min. Earth dist.	-1778 Jul 16 j 20:21	8° \mathcal{B} 08'14	28.98767 AU
retrograde	-1784 Apr 13 j 13:03	26° \mathcal{A} 14'13		direct	-1778 Oct 04 j 00:06	6° \mathcal{B} 44'01	
opposition	-1784 Jul 03 j 10:48	24° \mathcal{A} 49'50	0°12'58				
min. Earth dist.	-1784 Jul 02 j 19:03	24° \mathcal{A} 50'54	29.04283 AU	conjunction	-1777 Jan 13 j 17:58	9° \mathcal{B} 11'33	0°-18'-27
direct	-1784 Sep 20 j 07:09	23° \mathcal{A} 26'57		minimum elong	-1777 Jan 13 j 17:58	9° \mathcal{B} 11'33	0°18'30
				max. Earth dist.	-1777 Jan 14 j 15:27	9° \mathcal{B} 13'34	30.98407 AU
conjunction	-1784 Dec 31 j 02:13	25° \mathcal{A} 54'25	0°09'52	retrograde	-1777 Apr 30 j 05:57	11° \mathcal{B} 45'02	
minimum elong	-1784 Dec 31 j 02:13	25° \mathcal{A} 54'25	0°09'49	min. Earth dist.	-1777 Jul 19 j 08:09	10° \mathcal{B} 21'45	28.98093 AU
behind sun begin	-1784 Dec 30 j 20:57	25° \mathcal{A} 53'56		opposition	-1777 Jul 20 j 05:15	10° \mathcal{B} 20'18	0°-22'-15
behind sun end	-1784 Dec 31 j 07:29	25° \mathcal{A} 54'53		direct	-1777 Oct 06 j 11:33	8° \mathcal{B} 57'29	
max. Earth dist.	-1784 Dec 31 j 18:05	25° \mathcal{A} 55'54	31.03695 AU				
retrograde	-1783 Apr 16 j 03:02	28° \mathcal{A} 27'01		conjunction	-1776 Jan 16 j 04:52	11° \mathcal{B} 25'04	0°-23'-7
opposition	-1783 Jul 05 j 23:42	27° \mathcal{A} 02'32	0°07'56	minimum elong	-1776 Jan 16 j 04:52	11° \mathcal{B} 25'04	0°23'09
min. Earth dist.	-1783 Jul 05 j 06:48	27° \mathcal{A} 03'41	29.03139 AU	max. Earth dist.	-1776 Jan 17 j 01:48	11° \mathcal{B} 27'03	30.97729 AU
direct	-1783 Sep 22 j 18:29	25° \mathcal{A} 39'37		retrograde	-1776 May 01 j 20:47	13° \mathcal{B} 58'44	
				opposition	-1776 Jul 21 j 18:17	12° \mathcal{B} 33'59	0°-27'-13
conjunction	-1782 Jan 02 j 12:41	28° \mathcal{A} 07'03	0°05'11	min. Earth dist.	-1776 Jul 20 j 21:16	12° \mathcal{B} 35'26	28.97403 AU
minimum elong	-1782 Jan 02 j 12:41	28° \mathcal{A} 07'03	0°05'10	direct	-1776 Oct 07 j 21:44	11° \mathcal{B} 11'12	
behind sun begin	-1782 Jan 02 j 06:26	28° \mathcal{A} 06'29					
behind sun end	-1782 Jan 02 j 18:55	28° \mathcal{A} 07'37		conjunction	-1775 Jan 17 j 16:15	13° \mathcal{B} 38'51	0°-27'-45
max. Earth dist.	-1782 Jan 03 j 05:57	28° \mathcal{A} 08'41	31.02567 AU	minimum elong	-1775 Jan 17 j 16:15	13° \mathcal{B} 38'51	0°27'48
	-1782 Feb 27 j 10:17	0° \mathcal{B}		max. Earth dist.	-1775 Jan 18 j 14:29	13° \mathcal{B} 40'57	30.96994 AU
retrograde	-1782 Apr 18 j 13:34	0° \mathcal{B} 39'46		retrograde	-1775 May 04 j 10:31	16° \mathcal{B} 12'39	
	-1782 Jun 09 j 17:26	30° \mathcal{R} \mathcal{A}		min. Earth dist.	-1775 Jul 23 j 10:00	14° \mathcal{B} 49'19	28.96624 AU

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Attention, astronomical year style is used: The year -1775 in astronomical counting style is the year 1776 BCE in historical counting style.

opposition	-1775 Jul 24 j 07:05	14° $\overline{3}$ 47'53	0°-32'-10	min. Earth dist.	-1767 Aug 10 j 13:01	2° \approx 41'21	28.89039 AU
direct	-1775 Oct 10 j 10:57	13° $\overline{3}$ 25'06		direct	-1767 Oct 28 j 04:37	1° \approx 16'37	
conjunction	-1774 Jan 20 j 03:39	15° $\overline{3}$ 52'48	0°-32'-21	conjunction	-1766 Feb 07 j 01:06	3° \approx 44'31	-1°-6'-50
minimum elong	-1774 Jan 20 j 03:39	15° $\overline{3}$ 52'48	0°32'23	minimum elong	-1766 Feb 07 j 01:05	3° \approx 44'31	1°06'52
max. Earth dist.	-1774 Jan 21 j 01:04	15° $\overline{3}$ 54'50	30.96164 AU	max. Earth dist.	-1766 Feb 08 j 02:20	3° \approx 46'54	30.88668 AU
retrograde	-1774 May 07 j 01:29	18° $\overline{3}$ 26'44		retrograde	-1766 May 25 j 07:22	6° \approx 19'04	
opposition	-1774 Jul 26 j 20:01	17° $\overline{3}$ 01'55	0°-37'-4	min. Earth dist.	-1766 Aug 13 j 01:05	4° \approx 55'24	28.88467 AU
min. Earth dist.	-1774 Jul 25 j 22:25	17° $\overline{3}$ 03'24	28.95739 AU	opposition	-1766 Aug 14 j 00:43	4° \approx 53'45	-1°-13'-37
direct	-1774 Oct 12 j 22:17	15° $\overline{3}$ 39'07		direct	-1766 Oct 30 j 16:53	3° \approx 30'38	
conjunction	-1773 Jan 22 j 15:04	18° $\overline{3}$ 06'51	0°-36'-54	conjunction	-1765 Feb 09 j 12:59	5° \approx 58'37	-1°-10'-46
minimum elong	-1773 Jan 22 j 15:04	18° $\overline{3}$ 06'51	0°36'57	minimum elong	-1765 Feb 09 j 12:59	5° \approx 58'37	1°10'49
max. Earth dist.	-1773 Jan 23 j 13:12	18° $\overline{3}$ 08'57	30.95204 AU	max. Earth dist.	-1765 Feb 10 j 13:42	6° \approx 00'57	30.88151 AU
retrograde	-1773 May 09 j 13:14	20° $\overline{3}$ 40'54		retrograde	-1765 May 27 j 22:12	8° \approx 33'15	
min. Earth dist.	-1773 Jul 28 j 11:55	19° $\overline{3}$ 17'28	28.94725 AU	opposition	-1765 Aug 16 j 13:09	7° \approx 07'56	-1°-17'-46
opposition	-1773 Jul 29 j 08:59	19° $\overline{3}$ 16'01	0°-41'-54	min. Earth dist.	-1765 Aug 15 j 12:57	7° \approx 09'37	28.87998 AU
direct	-1773 Oct 15 j 10:33	17° $\overline{3}$ 53'12		direct	-1765 Nov 02 j 03:32	5° \approx 44'49	
conjunction	-1772 Jan 25 j 02:39	20° $\overline{3}$ 20'56	0°-41'-23	conjunction	-1764 Feb 12 j 01:17	8° \approx 12'53	-1°-14'-36
minimum elong	-1772 Jan 25 j 02:38	20° $\overline{3}$ 20'56	0°41'26	minimum elong	-1764 Feb 12 j 01:17	8° \approx 12'52	1°14'38
max. Earth dist.	-1772 Jan 26 j 00:45	20° $\overline{3}$ 23'02	30.94157 AU	max. Earth dist.	-1764 Feb 13 j 02:48	8° \approx 15'17	30.87697 AU
retrograde	-1772 May 11 j 03:16	22° $\overline{3}$ 55'03		retrograde	-1764 May 29 j 11:22	10° \approx 47'36	
opposition	-1772 Jul 30 j 21:43	21° $\overline{3}$ 30'05	0°-46'-40	min. Earth dist.	-1764 Aug 17 j 01:58	9° \approx 23'56	28.87566 AU
min. Earth dist.	-1772 Jul 29 j 23:38	21° $\overline{3}$ 31'37	28.93646 AU	opposition	-1764 Aug 18 j 01:31	9° \approx 22'17	-1°-21'-48
direct	-1772 Oct 16 j 22:50	20° $\overline{3}$ 07'13		direct	-1764 Nov 03 j 15:28	7° \approx 59'11	
conjunction	-1771 Jan 26 j 14:12	22° $\overline{3}$ 34'58	0°-45'-49	conjunction	-1763 Feb 13 j 13:46	10° \approx 27'19	-1°-18'-19
minimum elong	-1771 Jan 26 j 14:12	22° $\overline{3}$ 34'58	0°45'53	minimum elong	-1763 Feb 13 j 13:46	10° \approx 27'19	1°18'22
max. Earth dist.	-1771 Jan 27 j 12:29	22° $\overline{3}$ 37'04	30.93049 AU	max. Earth dist.	-1763 Feb 14 j 15:00	10° \approx 29'43	30.87270 AU
retrograde	-1771 May 13 j 15:33	25° $\overline{3}$ 09'09		retrograde	-1763 Jun 01 j 02:54	13° \approx 02'08	
opposition	-1771 Aug 02 j 10:29	23° $\overline{3}$ 44'06	0°-51'-23	opposition	-1763 Aug 20 j 13:50	11° \approx 36'49	-1°-25'-43
min. Earth dist.	-1771 Aug 01 j 13:13	23° $\overline{3}$ 45'34	28.92545 AU	min. Earth dist.	-1763 Aug 19 j 13:37	11° \approx 38'30	28.87127 AU
direct	-1771 Oct 19 j 09:34	22° $\overline{3}$ 21'10		direct	-1763 Nov 06 j 03:47	10° \approx 13'42	
conjunction	-1770 Jan 29 j 01:52	24° $\overline{3}$ 48'55	0°-50'-11	conjunction	-1762 Feb 16 j 02:20	12° \approx 41'57	-1°-21'-55
minimum elong	-1770 Jan 29 j 01:52	24° $\overline{3}$ 48'55	0°50'14	minimum elong	-1762 Feb 16 j 02:20	12° \approx 41'57	1°21'57
max. Earth dist.	-1770 Jan 30 j 01:02	24° $\overline{3}$ 51'06	30.91963 AU	max. Earth dist.	-1762 Feb 17 j 03:18	12° \approx 44'18	30.86784 AU
retrograde	-1770 May 16 j 03:12	27° $\overline{3}$ 23'09			-1762 May 02 j 07:36	15° \approx	
opposition	-1770 Aug 04 j 22:54	25° $\overline{3}$ 58'02	0°-56'00	retrograde	-1762 Jun 03 j 15:42	15° \approx 16'50	
min. Earth dist.	-1770 Aug 04 j 00:15	25° $\overline{3}$ 59'36	28.91492 AU		-1762 Jul 06 j 09:58	15° \approx	
direct	-1770 Oct 21 j 21:45	24° $\overline{3}$ 35'02		min. Earth dist.	-1762 Aug 22 j 03:19	13° \approx 53'06	28.86615 AU
conjunction	-1769 Jan 31 j 13:29	27° $\overline{3}$ 02'48	0°-54'-29	opposition	-1762 Aug 23 j 02:13	13° \approx 51'31	-1°-29'-30
minimum elong	-1769 Jan 31 j 13:28	27° $\overline{3}$ 02'48	0°54'32	direct	-1762 Nov 08 j 14:43	12° \approx 28'23	
max. Earth dist.	-1769 Feb 01 j 12:18	27° $\overline{3}$ 04'57	30.90947 AU	conjunction	-1761 Feb 18 j 15:08	14° \approx 56'41	-1°-25'-23
retrograde	-1769 May 18 j 15:36	29° $\overline{3}$ 37'07		minimum elong	-1761 Feb 18 j 15:08	14° \approx 56'41	1°25'26
opposition	-1769 Aug 07 j 11:32	28° $\overline{3}$ 11'55	-1°00'-33	max. Earth dist.	-1761 Feb 19 j 16:15	14° \approx 59'03	30.86234 AU
min. Earth dist.	-1769 Aug 06 j 13:17	28° $\overline{3}$ 13'27	28.90546 AU		-1761 Feb 20 j 02:14	15° \approx	
direct	-1769 Oct 24 j 07:06	26° $\overline{3}$ 48'52		retrograde	-1761 Jun 06 j 04:48	17° \approx 31'37	
conjunction	-1768 Feb 03 j 01:13	29° $\overline{3}$ 16'40	0°-58'-41	opposition	-1761 Aug 25 j 14:30	16° \approx 06'17	-1°-33'-9
minimum elong	-1768 Feb 03 j 01:13	29° $\overline{3}$ 16'40	0°58'43	min. Earth dist.	-1761 Aug 24 j 14:51	16° \approx 07'56	28.86020 AU
max. Earth dist.	-1768 Feb 04 j 01:36	29° $\overline{3}$ 18'58	30.90058 AU		-1761 Oct 10 j 06:07	15° \approx	
retrograde	-1768 Feb 22 j 09:02	0° \approx		direct	-1761 Nov 11 j 03:04	14° \approx 43'07	
opposition	-1768 May 20 j 04:07	1° \approx 51'03			-1761 Dec 12 j 06:53	15° \approx	
min. Earth dist.	-1768 Aug 08 j 23:58	0° \approx 25'48	-1°-5'00	conjunction	-1760 Feb 21 j 03:49	17° \approx 11'29	-1°-28'-44
	-1768 Aug 08 j 00:35	0° \approx 27'25	28.89721 AU	minimum elong	-1760 Feb 21 j 03:49	17° \approx 11'28	1°28'46
	-1768 Aug 24 j 17:53	30° \approx		max. Earth dist.	-1760 Feb 22 j 03:51	17° \approx 13'45	30.85591 AU
direct	-1768 Oct 25 j 18:26	29° $\overline{3}$ 02'43		retrograde	-1760 Jun 07 j 17:42	19° \approx 46'27	
	-1768 Dec 23 j 17:55	0° \approx		min. Earth dist.	-1760 Aug 26 j 04:23	18° \approx 22'39	28.85352 AU
conjunction	-1767 Feb 04 j 13:03	1° \approx 30'33	-1°-2'-48	opposition	-1760 Aug 27 j 02:52	18° \approx 21'04	-1°-36'-39
minimum elong	-1767 Feb 04 j 13:03	1° \approx 30'33	1°02'51	direct	-1760 Nov 12 j 12:56	16° \approx 57'51	
max. Earth dist.	-1767 Feb 05 j 12:50	1° \approx 32'48	30.89299 AU	conjunction	-1759 Feb 22 j 16:49	19° \approx 26'16	-1°-31'-57
retrograde	-1767 May 22 j 18:13	4° \approx 05'01		minimum elong	-1759 Feb 22 j 16:49	19° \approx 26'16	1°31'59
opposition	-1767 Aug 11 j 12:19	2° \approx 39'44	-1°-9'-22	max. Earth dist.	-1759 Feb 23 j 17:37	19° \approx 28'36	30.84897 AU

Attention, astronomical year style is used: The year -1759 in astronomical counting style is the year 1760 BCE in historical counting style.

retrograde	-1759 Jun 10 j 06:07	22° 01 '14		retrograde	-1751 Jun 28 j 19:29	9° 15 '55	
opposition	-1759 Aug 29 j 14:48	20° 35 '50	-1°-40'-1	opposition	-1751 Sep 16 j 13:23	8° 13 '32	-2°-1'-4
min. Earth dist.	-1759 Aug 28 j 15:52	20° 37 '26	28.84647 AU	min. Earth dist.	-1751 Sep 15 j 16:23	8° 13 '01	28.82608 AU
direct	-1759 Nov 15 j 00:37	19° 12 '33		direct	-1751 Dec 02 j 20:10	7° 11 '02	
conjunction	-1758 Feb 25 j 05:37	21° 41 '00	-1°-35'-1	conjunction	-1750 Mar 15 j 15:33	9° 14 '12	-1°-54'-5
minimum elong	-1758 Feb 25 j 05:37	21° 41 '00	1°35'03	minimum elong	-1750 Mar 15 j 15:33	9° 14 '12	1°54'06
max. Earth dist.	-1758 Feb 26 j 05:17	21° 43 '14	30.84200 AU	max. Earth dist.	-1750 Mar 16 j 15:13	9° 14 '25	30.82502 AU
retrograde	-1758 Jun 12 j 19:19	24° 16 '00		retrograde	-1750 Jul 01 j 08:00	12° 15 '14	
min. Earth dist.	-1758 Aug 31 j 04:32	22° 52 '06	28.83985 AU	min. Earth dist.	-1750 Sep 18 j 03:55	10° 15 '23	28.82666 AU
opposition	-1758 Sep 01 j 02:54	22° 50 '32	-1°-43'-14	opposition	-1750 Sep 19 j 01:03	10° 14 '53	-2°-2'-54
direct	-1758 Nov 17 j 11:03	21° 27 '11		direct	-1750 Dec 05 j 08:13	9° 12 '22	
conjunction	-1757 Feb 27 j 18:28	23° 55 '42	-1°-37'-57	conjunction	-1749 Mar 18 j 05:11	11° 15 '37	-1°-55'-42
minimum elong	-1757 Feb 27 j 18:28	23° 55 '42	1°38'00	minimum elong	-1749 Mar 18 j 05:11	11° 15 '37	1°55'44
max. Earth dist.	-1757 Feb 28 j 19:18	23° 58 '03	30.83563 AU	max. Earth dist.	-1749 Mar 19 j 03:07	11° 15 '40	30.82526 AU
retrograde	-1757 Jun 15 j 07:35	26° 30 '42		retrograde	-1749 Jul 03 j 20:48	14° 13 '38	
opposition	-1757 Sep 03 j 14:53	25° 05 '12	-1°-46'-17	opposition	-1749 Sep 21 j 12:52	13° 10 '18	-2°-4'-33
min. Earth dist.	-1757 Sep 02 j 16:28	25° 06 '47	28.83400 AU	min. Earth dist.	-1749 Sep 20 j 16:52	13° 10 '43	28.82655 AU
direct	-1757 Nov 19 j 23:14	23° 41 '48		direct	-1749 Dec 07 j 18:41	11° 14 '44	
conjunction	-1756 Mar 01 j 07:25	26° 10 '23	-1°-40'-44	conjunction	-1748 Mar 19 j 19:16	14° 11 '04	-1°-57'-10
minimum elong	-1756 Mar 01 j 07:24	26° 10 '23	1°40'45	minimum elong	-1748 Mar 19 j 19:16	14° 11 '04	1°57'11
max. Earth dist.	-1756 Mar 02 j 07:19	26° 12 '38	30.83041 AU	max. Earth dist.	-1748 Mar 20 j 17:31	14° 13 '09	30.82462 AU
retrograde	-1756 Jun 16 j 21:58	28° 45 '23		retrograde	-1748 Jul 05 j 08:34	16° 14 '01	
min. Earth dist.	-1756 Sep 04 j 03:59	27° 21 '28	28.82954 AU	min. Earth dist.	-1748 Sep 22 j 05:08	15° 12 '04	28.82543 AU
opposition	-1756 Sep 05 j 02:41	27° 19 '52	-1°-49'-10	opposition	-1748 Sep 23 j 00:25	15° 12 '42	-2°-6'00
direct	-1756 Nov 21 j 09:34	25° 56 '24		direct	-1748 Dec 09 j 06:28	13° 15 '04	
conjunction	-1755 Mar 03 j 20:33	28° 25 '05	-1°-43'-22	conjunction	-1747 Mar 22 j 09:14	16° 12 '27	-1°-58'-26
minimum elong	-1755 Mar 03 j 20:33	28° 25 '05	1°43'24	minimum elong	-1747 Mar 22 j 09:14	16° 12 '27	1°58'28
max. Earth dist.	-1755 Mar 04 j 21:07	28° 27 '24	30.82649 AU	max. Earth dist.	-1747 Mar 23 j 05:40	16° 12 '22	30.82322 AU
retrograde	-1755 Apr 18 j 00:30	0° 11 '		retrograde	-1747 Jul 07 j 22:37	19° 10 '20	
opposition	-1755 Jun 19 j 11:03	1° 00 '05		opposition	-1747 Sep 25 j 11:58	17° 13 '00	-2°-7'-16
min. Earth dist.	-1755 Aug 23 j 06:46	30° 18 '		min. Earth dist.	-1747 Sep 24 j 17:07	17° 13 '20	28.82378 AU
opposition	-1755 Sep 07 j 14:33	29° 34 '34	-1°-51'-54	direct	-1747 Dec 11 j 17:10	16° 12 '17	
min. Earth dist.	-1755 Sep 06 j 16:26	29° 36 '07	28.82640 AU	conjunction	-1746 Mar 24 j 23:09	18° 14 '44	-1°-59'-32
direct	-1755 Nov 23 j 21:52	28° 11 '05		minimum elong	-1746 Mar 24 j 23:09	18° 14 '44	1°59'33
	-1754 Feb 16 j 13:49	0° 11 '		max. Earth dist.	-1746 Mar 25 j 19:42	18° 14 '39	30.82130 AU
conjunction	-1754 Mar 06 j 09:36	0° 13 '50	-1°-45'-50	retrograde	-1746 Jul 10 j 10:17	21° 16 '31	
minimum elong	-1754 Mar 06 j 09:36	0° 13 '50	1°45'52	opposition	-1746 Sep 27 j 23:27	19° 15 '10	-2°-8'-21
max. Earth dist.	-1754 Mar 07 j 09:51	0° 14 '07	30.82415 AU	min. Earth dist.	-1746 Sep 27 j 05:43	19° 15 '25	28.82187 AU
retrograde	-1754 Jun 22 j 02:32	3° 14 '51		direct	-1746 Dec 14 j 05:49	18° 12 '23	
min. Earth dist.	-1754 Sep 09 j 03:19	1° 15 '57	28.82481 AU	conjunction	-1745 Mar 27 j 13:06	20° 15 '52	-2°00'-27
opposition	-1754 Sep 10 j 02:15	1° 14 '21	-1°-54'-27	minimum elong	-1745 Mar 27 j 13:07	20° 15 '52	2°00'29
direct	-1754 Nov 26 j 10:35	0° 12 '50		max. Earth dist.	-1745 Mar 28 j 08:39	20° 15 '42	30.81965 AU
conjunction	-1753 Mar 08 j 22:48	2° 15 '42	-1°-48'-9	retrograde	-1745 Jul 13 j 00:40	23° 13 '34	
minimum elong	-1753 Mar 08 j 22:48	2° 15 '42	1°48'11	opposition	-1745 Sep 30 j 10:42	22° 10 '12	-2°-9'-14
max. Earth dist.	-1753 Mar 09 j 23:02	2° 15 '59	30.82315 AU	min. Earth dist.	-1745 Sep 29 j 16:40	22° 10 '28	28.82049 AU
retrograde	-1753 Jun 24 j 15:12	5° 12 '44		direct	-1745 Dec 16 j 18:40	20° 14 '19	
opposition	-1753 Sep 12 j 14:04	4° 10 '15	-1°-56'-50	conjunction	-1744 Mar 29 j 03:07	23° 11 '53	-2°-1'-11
min. Earth dist.	-1753 Sep 11 j 16:18	4° 10 '47	28.82453 AU	minimum elong	-1744 Mar 29 j 03:07	23° 11 '53	2°01'12
direct	-1753 Nov 28 j 21:39	2° 14 '45		max. Earth dist.	-1744 Mar 29 j 22:19	23° 13 '41	30.81853 AU
conjunction	-1752 Mar 10 j 12:13	5° 09 '42	-1°-50'-18	retrograde	-1744 Jul 14 j 12:53	25° 14 '30	
minimum elong	-1752 Mar 10 j 12:13	5° 09 '42	1°50'19	opposition	-1744 Oct 01 j 22:03	24° 12 '07	-2°-9'-54
max. Earth dist.	-1752 Mar 11 j 12:39	5° 12 '00	30.82344 AU	min. Earth dist.	-1744 Oct 01 j 05:29	24° 12 '18	28.81989 AU
retrograde	-1752 Jun 26 j 05:26	7° 14 '44		direct	-1744 Dec 18 j 06:13	22° 15 '11	
min. Earth dist.	-1752 Sep 13 j 03:17	6° 12 '53	28.82514 AU	conjunction	-1743 Mar 31 j 17:12	25° 16 '49	-2°-1'-44
opposition	-1752 Sep 14 j 01:43	6° 11 '19	-1°-59'-2	minimum elong	-1743 Mar 31 j 17:12	25° 16 '49	2°01'45
direct	-1752 Nov 30 j 10:01	4° 15 '48		max. Earth dist.	-1743 Apr 01 j 12:11	25° 16 '36	30.81852 AU
conjunction	-1751 Mar 13 j 01:44	7° 12 '52	-1°-52'-16	retrograde	-1743 Jul 17 j 03:07	28° 10 '19	
minimum elong	-1751 Mar 13 j 01:44	7° 12 '52	1°52'18	opposition	-1743 Oct 04 j 09:06	26° 13 '58	-2°-10'-23
max. Earth dist.	-1751 Mar 14 j 01:02	7° 12 '04	30.82419 AU	min. Earth dist.	-1743 Oct 03 j 15:57	26° 13 '11	28.82046 AU

Attention, astronomical year style is used: The year -1743 in astronomical counting style is the year 1744 BCE in historical counting style.

direct	-1743 Dec 20 j 19:16	25° ℵ 11'59		opposition	-1735 Oct 22 j 01:36	14° ♊ 37'20	-2°-7'-1
				min. Earth dist.	-1735 Oct 21 j 15:25	14° ♊ 38'03	28.85081 AU
conjunction	-1742 Apr 03 j 07:10	27° ℵ 41'43	-2°-2'-5	direct	-1734 Jan 07 j 14:21	13° ♊ 13'08	
minimum elong	-1742 Apr 03 j 07:10	27° ℵ 41'43	2°02'06				
max. Earth dist.	-1742 Apr 04 j 01:06	27° ℵ 43'23	30.81973 AU	conjunction	-1734 Apr 22 j 02:07	15° ♊ 43'38	-1°-58'-13
	-1742 Jun 18 j 06:10	0° ♊		minimum elong	-1734 Apr 22 j 02:07	15° ♊ 43'38	1°58'13
retrograde	-1742 Jul 19 j 16:46	0° ♊ 16'09		max. Earth dist.	-1734 Apr 22 j 13:38	15° ♊ 44'43	30.85062 AU
	-1742 Aug 20 j 07:15	30° ♊		retrograde	-1734 Aug 06 j 22:10	18° ♊ 17'20	
opposition	-1742 Oct 06 j 20:22	28° ♊ 50'49	-2°-10'-40	opposition	-1734 Oct 24 j 12:22	16° ♊ 52'29	-2°-5'-43
min. Earth dist.	-1742 Oct 06 j 04:26	28° ♊ 51'57	28.82248 AU	min. Earth dist.	-1734 Oct 24 j 02:07	16° ♊ 53'13	28.85295 AU
direct	-1742 Dec 23 j 06:05	27° ℵ 26'49		direct	-1733 Jan 10 j 04:24	15° ♊ 28'14	
conjunction	-1741 Apr 05 j 21:13	29° ℵ 56'37	-2°-2'-16	conjunction	-1733 Apr 24 j 16:28	17° ♊ 58'46	-1°-56'-55
minimum elong	-1741 Apr 05 j 21:13	29° ℵ 56'37	2°02'16	minimum elong	-1733 Apr 24 j 16:28	17° ♊ 58'46	1°56'55
max. Earth dist.	-1741 Apr 06 j 15:35	29° ℵ 58'21	30.82248 AU	max. Earth dist.	-1733 Apr 25 j 02:34	17° ♊ 59'43	30.85270 AU
	-1741 Apr 07 j 09:17	0° ♊		retrograde	-1733 Aug 09 j 10:56	20° ♊ 32'18	
retrograde	-1741 Jul 22 j 05:08	2° ♊ 30'59		opposition	-1733 Oct 26 j 23:12	19° ♊ 07'28	-2°-4'-14
opposition	-1741 Oct 09 j 07:27	1° ♊ 05'44	-2°-10'-45	min. Earth dist.	-1733 Oct 26 j 14:40	19° ♊ 08'04	28.85511 AU
min. Earth dist.	-1741 Oct 08 j 15:14	1° ♊ 06'53	28.82577 AU	direct	-1732 Jan 12 j 16:38	17° ♊ 43'07	
	-1741 Nov 22 j 14:18	30° ♊					
direct	-1741 Dec 25 j 18:34	29° ℵ 41'43		conjunction	-1732 Apr 26 j 07:01	20° ♊ 13'42	-1°-55'-26
	-1740 Jan 27 j 10:23	0° ♊		minimum elong	-1732 Apr 26 j 07:02	20° ♊ 13'42	1°55'26
				max. Earth dist.	-1732 Apr 26 j 16:58	20° ♊ 14'38	30.85509 AU
conjunction	-1740 Apr 07 j 11:21	2° ♊ 11'37	-2°-2'-15	retrograde	-1732 Aug 10 j 22:57	22° ♊ 47'03	
minimum elong	-1740 Apr 07 j 11:21	2° ♊ 11'37	2°02'15	opposition	-1732 Oct 28 j 09:43	21° ♊ 22'14	-2°-2'-34
max. Earth dist.	-1740 Apr 08 j 04:07	2° ♊ 13'11	30.82643 AU	min. Earth dist.	-1732 Oct 28 j 01:13	21° ♊ 22'50	28.85769 AU
retrograde	-1740 Jul 23 j 17:59	4° ♊ 45'55		direct	-1731 Jan 14 j 06:04	19° ♊ 57'48	
opposition	-1740 Oct 10 j 18:30	3° ♊ 20'45	-2°-10'-38				
min. Earth dist.	-1740 Oct 10 j 03:20	3° ♊ 21'49	28.83027 AU	conjunction	-1731 Apr 28 j 21:21	22° ♊ 28'26	-1°-53'-47
direct	-1740 Dec 27 j 04:42	1° ♊ 56'43		minimum elong	-1731 Apr 28 j 21:22	22° ♊ 28'26	1°53'47
				max. Earth dist.	-1731 Apr 29 j 05:32	22° ♊ 29'12	30.85814 AU
conjunction	-1739 Apr 10 j 01:44	4° ♊ 26'45	-2°-2'-2	retrograde	-1731 Aug 13 j 11:52	25° ♊ 01'36	
minimum elong	-1739 Apr 10 j 01:45	4° ♊ 26'45	2°02'03	opposition	-1731 Oct 30 j 20:23	23° ♊ 36'48	-2°00'-42
max. Earth dist.	-1739 Apr 10 j 19:00	4° ♊ 28'22	30.83127 AU	min. Earth dist.	-1731 Oct 30 j 12:57	23° ♊ 37'20	28.86132 AU
retrograde	-1739 Jul 26 j 05:58	7° ♊ 01'00		direct	-1730 Jan 16 j 17:07	22° ♊ 12'18	
opposition	-1739 Oct 13 j 05:33	5° ♊ 35'54	-2°-10'-18				
min. Earth dist.	-1739 Oct 12 j 15:04	5° ♊ 36'56	28.83525 AU	conjunction	-1730 May 01 j 11:37	24° ♊ 42'59	-1°-51'-57
direct	-1739 Dec 29 j 15:52	4° ♊ 11'53		minimum elong	-1730 May 01 j 11:37	24° ♊ 42'59	1°51'58
				max. Earth dist.	-1730 May 01 j 20:19	24° ♊ 43'47	30.86238 AU
conjunction	-1738 Apr 12 j 15:53	6° ♊ 42'02	-2°-1'-38	retrograde	-1730 Aug 15 j 23:17	27° ♊ 15'59	
minimum elong	-1738 Apr 12 j 15:53	6° ♊ 42'02	2°01'39	opposition	-1730 Nov 02 j 06:58	25° ♊ 51'13	-1°-58'-40
max. Earth dist.	-1738 Apr 13 j 07:16	6° ♊ 43'28	30.83640 AU	min. Earth dist.	-1730 Nov 02 j 00:01	25° ♊ 51'43	28.86617 AU
retrograde	-1738 Jul 28 j 19:30	9° ♊ 16'13		direct	-1729 Jan 19 j 05:15	24° ♊ 26'40	
opposition	-1738 Oct 15 j 16:38	7° ♊ 51'13	-2°-9'-47				
min. Earth dist.	-1738 Oct 15 j 02:43	7° ♊ 52'12	28.84033 AU	conjunction	-1729 May 04 j 01:51	26° ♊ 57'23	-1°-49'-58
direct	-1737 Jan 01 j 01:59	6° ♊ 27'11		minimum elong	-1729 May 04 j 01:51	26° ♊ 57'23	1°49'58
				max. Earth dist.	-1729 May 04 j 08:47	26° ♊ 58'02	30.86808 AU
conjunction	-1737 Apr 15 j 06:27	8° ♊ 57'26	-2°-1'-4	retrograde	-1729 Aug 18 j 11:19	29° ♊ 30'14	
minimum elong	-1737 Apr 15 j 06:27	8° ♊ 57'26	2°01'04	opposition	-1729 Nov 04 j 17:23	28° ♊ 05'32	-1°-56'-26
max. Earth dist.	-1737 Apr 15 j 21:38	8° ♊ 58'52	30.84117 AU	min. Earth dist.	-1729 Nov 04 j 10:44	28° ♊ 06'00	28.87263 AU
retrograde	-1737 Jul 31 j 06:35	11° ♊ 31'32		direct	-1728 Jan 21 j 15:58	26° ♊ 40'56	
opposition	-1737 Oct 18 j 03:39	10° ♊ 06'36	-2°-9'-3				
min. Earth dist.	-1737 Oct 17 j 15:17	10° ♊ 07'29	28.84473 AU	conjunction	-1728 May 05 j 16:18	29° ♊ 11'43	-1°-47'-48
direct	-1736 Jan 03 j 14:17	8° ♊ 42'33		minimum elong	-1728 May 05 j 16:18	29° ♊ 11'43	1°47'49
				max. Earth dist.	-1728 May 05 j 23:27	29° ♊ 12'23	30.87525 AU
conjunction	-1736 Apr 16 j 21:00	11° ♊ 12'54	-2°00'-17		-1728 May 27 j 15:07	0° ♊	
minimum elong	-1736 Apr 16 j 21:00	11° ♊ 12'54	2°00'18	retrograde	-1728 Aug 19 j 21:22	1° ♊ 44'26	
max. Earth dist.	-1736 Apr 17 j 10:20	11° ♊ 14'09	30.84523 AU	opposition	-1728 Nov 06 j 03:56	0° ♊ 19'48	-1°-54'-2
retrograde	-1736 Aug 01 j 20:30	13° ♊ 46'54		min. Earth dist.	-1728 Nov 05 j 22:28	0° ♊ 20'12	28.88039 AU
opposition	-1736 Oct 19 j 14:38	12° ♊ 22'00	-2°-8'-8		-1728 Nov 17 j 20:42	30° ♊	
min. Earth dist.	-1736 Oct 19 j 02:28	12° ♊ 22'52	28.84824 AU	direct	-1727 Jan 23 j 03:32	28° ♊ 55'11	
direct	-1735 Jan 05 j 02:56	10° ♊ 57'53			-1727 Mar 28 j 08:43	0° ♊	
conjunction	-1735 Apr 19 j 11:35	13° ♊ 28'20	-1°-59'-21	conjunction	-1727 May 08 j 06:32	1° ♊ 26'04	-1°-45'-29
minimum elong	-1735 Apr 19 j 11:36	13° ♊ 28'20	1°59'21	minimum elong	-1727 May 08 j 06:33	1° ♊ 26'04	1°45'28
max. Earth dist.	-1735 Apr 20 j 00:03	13° ♊ 29'30	30.84820 AU	max. Earth dist.	-1727 May 08 j 12:09	1° ♊ 26'35	30.88374 AU
retrograde	-1735 Aug 04 j 08:10	16° ♊ 02'11		retrograde	-1727 Aug 22 j 10:30	3° ♊ 58'38	

Attention, astronomical year style is used: The year -1727 in astronomical counting style is the year 1728 BCE in historical counting style.

opposition	-1727 Nov 08 j 14:18	2°8'34"06	-1°-51'-28	max. Earth dist.	-1719 May 26 j 22:49	19°8'20"27	30.94608 AU
min. Earth dist.	-1727 Nov 08 j 08:44	2°8'34"30	28.88928 AU	retrograde	-1719 Sep 09 j 08:12	21°8'51"55	
direct	-1726 Jan 25 j 14:57	1°8'09"28		opposition	-1719 Nov 26 j 01:23	20°8'27"58	-1°-25'-15
				min. Earth dist.	-1719 Nov 26 j 04:25	20°8'27"45	28.95023 AU
conjunction	-1726 May 10 j 20:55	3°8'40"27	-1°-42'-59	direct	-1718 Feb 12 j 16:25	19°8'03"02	
minimum elong	-1726 May 10 j 20:55	3°8'40"27	1°43'00				
max. Earth dist.	-1726 May 11 j 02:05	3°8'40"56	30.89296 AU	conjunction	-1718 May 29 j 15:10	21°8'34"27	-1°-17'-56
retrograde	-1726 Aug 24 j 21:20	6°8'12"53		minimum elong	-1718 May 29 j 15:10	21°8'34"27	1°17'56
opposition	-1726 Nov 11 j 00:48	4°8'48"28	-1°-48'-43	max. Earth dist.	-1718 May 29 j 11:04	21°8'34"04	30.95351 AU
min. Earth dist.	-1726 Nov 10 j 21:08	4°8'48"44	28.89867 AU	retrograde	-1718 Sep 11 j 20:35	24°8'05"30	
direct	-1725 Jan 28 j 01:35	3°8'23"50		opposition	-1718 Nov 28 j 11:26	22°8'41"36	-1°-21'-21
				min. Earth dist.	-1718 Nov 28 j 14:15	22°8'41"24	28.95817 AU
conjunction	-1725 May 13 j 11:19	5°8'54"54	-1°-40'-21	direct	-1717 Feb 15 j 03:24	21°8'16"37	
minimum elong	-1725 May 13 j 11:19	5°8'54"54	1°40'20				
max. Earth dist.	-1725 May 13 j 15:22	5°8'55"17	30.90245 AU	conjunction	-1717 Jun 01 j 05:08	23°8'48"04	-1°-14'-14
retrograde	-1725 Aug 27 j 10:37	8°8'27"13		minimum elong	-1717 Jun 01 j 05:08	23°8'48"04	1°14'13
opposition	-1725 Nov 13 j 11:13	7°8'02"54	-1°-45'-48	max. Earth dist.	-1717 Jun 01 j 00:52	23°8'47"41	30.96202 AU
min. Earth dist.	-1725 Nov 13 j 07:39	7°8'03"09	28.90784 AU	retrograde	-1717 Sep 14 j 05:45	26°8'18"56	
direct	-1724 Jan 30 j 15:19	5°8'38"15		opposition	-1717 Nov 30 j 21:41	24°8'55"07	-1°-17'-21
				min. Earth dist.	-1717 Dec 01 j 02:06	24°8'54"48	28.96731 AU
conjunction	-1724 May 15 j 01:49	8°8'09"25	-1°-37'-33	direct	-1716 Feb 17 j 13:56	23°8'30"06	
minimum elong	-1724 May 15 j 01:49	8°8'09"25	1°37'32				
max. Earth dist.	-1724 May 15 j 04:14	8°8'09"38	30.91127 AU	conjunction	-1716 Jun 02 j 19:03	26°8'01"36	-1°-10'-26
retrograde	-1724 Aug 28 j 22:45	10°8'41"34		minimum elong	-1716 Jun 02 j 19:03	26°8'01"36	1°10'26
opposition	-1724 Nov 14 j 21:43	9°8'17"20	-1°-42'-44	max. Earth dist.	-1716 Jun 02 j 13:54	26°8'01"07	30.97196 AU
min. Earth dist.	-1724 Nov 14 j 20:07	9°8'17"27	28.91630 AU	retrograde	-1716 Sep 15 j 17:20	28°8'32"17	
direct	-1723 Feb 01 j 03:12	7°8'52"40		opposition	-1716 Dec 02 j 07:43	27°8'08"34	-1°-13'-13
				min. Earth dist.	-1716 Dec 02 j 11:47	27°8'08"16	28.97782 AU
conjunction	-1723 May 17 j 16:21	10°8'23"54	-1°-34'-36	direct	-1715 Feb 19 j 03:32	25°8'43"32	
minimum elong	-1723 May 17 j 16:21	10°8'23"54	1°34'35				
max. Earth dist.	-1723 May 17 j 18:06	10°8'24"04	30.91934 AU	conjunction	-1715 Jun 05 j 08:54	28°8'15"05	-1°-6'-31
retrograde	-1723 Aug 31 j 11:07	12°8'55"54		minimum elong	-1715 Jun 05 j 08:54	28°8'15"05	1°06'30
opposition	-1723 Nov 17 j 08:12	11°8'31"44	-1°-39'-31	max. Earth dist.	-1715 Jun 05 j 02:53	28°8'14"32	30.98314 AU
min. Earth dist.	-1723 Nov 17 j 06:56	11°8'31"50	28.92378 AU		-1715 Jul 27 j 05:08	0°II	
direct	-1722 Feb 03 j 16:43	10°8'07"02		retrograde	-1715 Sep 18 j 04:26	0°II45"38	
					-1715 Nov 11 j 12:32	30°R8	
conjunction	-1722 May 20 j 06:29	12°8'38"19	-1°-31'-31	opposition	-1715 Dec 04 j 17:59	29°8'22"00	-1°-8'-59
minimum elong	-1722 May 20 j 06:30	12°8'38"19	1°31'32	min. Earth dist.	-1715 Dec 04 j 23:28	29°8'21"37	28.98961 AU
max. Earth dist.	-1722 May 20 j 06:07	12°8'38"17	30.92650 AU	direct	-1714 Feb 21 j 14:36	27°8'56"59	
	-1722 Aug 09 j 10:33	15°8			-1714 May 26 j 00:39	0°II	
retrograde	-1722 Sep 03 j 00:07	15°8'10"08					
	-1722 Sep 27 j 14:12	15°R8		conjunction	-1714 Jun 07 j 22:37	0°II28"36	-1°-2'-30
opposition	-1722 Nov 19 j 18:39	13°8'46"02	-1°-36'-9	minimum elong	-1714 Jun 07 j 22:37	0°II28"36	1°02'30
min. Earth dist.	-1722 Nov 19 j 18:48	13°8'46"01	28.93062 AU	max. Earth dist.	-1714 Jun 07 j 16:23	0°II28"01	30.99545 AU
direct	-1721 Feb 06 j 04:21	12°8'21"17		retrograde	-1714 Sep 20 j 16:21	2°II58"59	
				opposition	-1714 Dec 07 j 04:07	1°II35"28	-1°-4'-39
conjunction	-1721 May 22 j 20:55	14°8'52"37	-1°-28'-19	min. Earth dist.	-1714 Dec 07 j 09:46	1°II35"04	29.00202 AU
minimum elong	-1721 May 22 j 20:55	14°8'52"37	1°28'18	direct	-1713 Feb 24 j 03:34	0°II10"28	
max. Earth dist.	-1721 May 22 j 20:30	14°8'52"34	30.93311 AU				
	-1721 May 26 j 04:28	15°8		conjunction	-1713 Jun 10 j 12:26	2°II42"09	0°-58'-24
retrograde	-1721 Sep 05 j 11:22	17°8'24"14		minimum elong	-1713 Jun 10 j 12:27	2°II42"09	0°58'23
opposition	-1721 Nov 22 j 04:53	16°8'00"11	-1°-32'-39	max. Earth dist.	-1713 Jun 10 j 04:21	2°II41"24	31.00800 AU
min. Earth dist.	-1721 Nov 22 j 06:03	16°8'00"06	28.93692 AU	retrograde	-1713 Sep 23 j 05:23	5°II12"23	
	-1721 Dec 31 j 12:16	15°R8		opposition	-1713 Dec 09 j 14:15	3°II48"58	-1°00'-12
direct	-1720 Feb 08 j 17:13	14°8'35"23		min. Earth dist.	-1713 Dec 09 j 21:13	3°II48"29	29.01453 AU
	-1720 Mar 18 j 08:48	15°8		direct	-1712 Feb 26 j 15:33	2°II23"59	
conjunction	-1720 May 24 j 11:07	17°8'06"44	-1°-24'-58	conjunction	-1712 Jun 12 j 02:26	4°II55"44	0°-54'-12
minimum elong	-1720 May 24 j 11:08	17°8'06"44	1°24'59	minimum elong	-1712 Jun 12 j 02:27	4°II55"44	0°54'12
max. Earth dist.	-1720 May 24 j 08:32	17°8'06"30	30.93949 AU	max. Earth dist.	-1712 Jun 11 j 18:16	4°II54"58	31.02021 AU
retrograde	-1720 Sep 06 j 22:56	19°8'38"10		retrograde	-1712 Sep 24 j 16:29	7°II25"48	
opposition	-1720 Nov 23 j 15:08	18°8'14"10	-1°-29'-1	opposition	-1712 Dec 11 j 00:34	6°II02"29	0°-55'-41
min. Earth dist.	-1720 Nov 23 j 16:52	18°8'14"02	28.94338 AU	min. Earth dist.	-1712 Dec 11 j 08:38	6°II01"55	29.02624 AU
direct	-1719 Feb 10 j 04:41	16°8'49"17		direct	-1711 Feb 28 j 05:06	4°II37"30	
conjunction	-1719 May 27 j 01:14	19°8'20"41	-1°-21'-31	conjunction	-1711 Jun 14 j 16:04	7°II09"16	0°-49'-56
minimum elong	-1719 May 27 j 01:14	19°8'20"41	1°21'30	minimum elong	-1711 Jun 14 j 16:04	7°II09"16	0°49'54

Attention, astronomical year style is used: The year -1711 in astronomical counting style is the year 1712 BCE in historical counting style.

max. Earth dist.	-1711 Jun 14 j 05:39	7°II08'18	31.03148 AU	retrograde	-1703 Oct 14 j 16:17	27°II20'11	
retrograde	-1711 Sep 27 j 04:23	9°II39'10		opposition	-1703 Dec 30 j 20:20	25°II57'25	0°-12'-18
opposition	-1711 Dec 13 j 10:51	8°II15'57	0°-51'-4	min. Earth dist.	-1703 Dec 31 j 10:58	25°II56'23	29.10830 AU
min. Earth dist.	-1711 Dec 13 j 19:31	8°II15'20	29.03701 AU	direct	-1702 Mar 20 j 18:22	24°II32'08	
direct	-1710 Mar 02 j 16:53	6°II50'56					
				conjunction	-1702 Jul 05 j 15:18	27°II03'59	0°-9'-12
conjunction	-1710 Jun 17 j 05:54	9°II22'44	0°-45'-35	minimum elong	-1702 Jul 05 j 15:18	27°II03'59	0°09'12
minimum elong	-1710 Jun 17 j 05:54	9°II22'44	0°45'35	behind sun begin	-1702 Jul 05 j 09:46	27°II03'29	
max. Earth dist.	-1710 Jun 16 j 19:22	9°II21'45	31.04164 AU	behind sun end	-1702 Jul 05 j 20:50	27°II04'28	
retrograde	-1710 Sep 29 j 14:16	11°II52'26		max. Earth dist.	-1702 Jul 04 j 21:52	27°II02'22	31.11401 AU
opposition	-1710 Dec 15 j 21:06	10°II29'17	0°-46'-24	retrograde	-1702 Oct 17 j 04:07	29°II32'20	
min. Earth dist.	-1710 Dec 16 j 07:28	10°II28'33	29.04657 AU	opposition	-1701 Jan 02 j 06:20	28°II09'40	0°-7'-19
direct	-1709 Mar 05 j 05:02	9°II04'14		min. Earth dist.	-1701 Jan 02 j 21:07	28°II08'38	29.12009 AU
				direct	-1701 Mar 23 j 05:40	26°II44'25	
conjunction	-1709 Jun 19 j 19:30	11°II36'02	0°-41'-11	max. Earth dist.	-1701 Jul 07 j 11:15	29°II14'44	31.12592 AU
minimum elong	-1709 Jun 19 j 19:30	11°II36'02	0°41'10				
max. Earth dist.	-1709 Jun 19 j 06:50	11°II34'51	31.05078 AU	conjunction	-1701 Jul 08 j 04:15	29°II16'18	0°-4'-33
retrograde	-1709 Oct 02 j 02:19	14°II05'32		minimum elong	-1701 Jul 08 j 04:14	29°II16'18	0°04'31
opposition	-1709 Dec 18 j 07:16	12°II42'26	0°-41'-39	behind sun begin	-1701 Jul 07 j 21:48	29°II15'44	
min. Earth dist.	-1709 Dec 18 j 17:43	12°II41'42	29.05517 AU	behind sun end	-1701 Jul 08 j 10:41	29°II16'52	
direct	-1708 Mar 06 j 16:50	11°II17'20			-1701 Jul 28 j 01:42	0°☾	
				retrograde	-1701 Oct 19 j 14:15	1°☾44'32	
conjunction	-1708 Jun 21 j 09:07	13°II49'08	0°-36'-43	opposition	-1700 Jan 04 j 16:40	0°☾21'59	0°-2'-19
minimum elong	-1708 Jun 21 j 09:07	13°II49'08	0°36'43	min. Earth dist.	-1700 Jan 05 j 08:49	0°☾20'51	29.13197 AU
max. Earth dist.	-1708 Jun 20 j 20:01	13°II47'55	31.05895 AU		-1700 Jan 17 j 22:09	30°☾II	
retrograde	-1708 Oct 03 j 10:47	16°II18'27		direct	-1700 Mar 24 j 17:56	28°II56'46	
opposition	-1708 Dec 19 j 17:32	14°II55'23	0°-36'-52		-1700 May 28 j 03:59	0°☾	
min. Earth dist.	-1708 Dec 20 j 05:52	14°II54'31	29.06308 AU	asc. node	-1700 Jun 24 j 11:04	0°☾55'02	
direct	-1707 Mar 09 j 03:56	13°II30'14					
				conjunction	-1700 Jul 09 j 16:54	1°☾28'42	0°00'12
conjunction	-1707 Jun 23 j 22:27	16°II02'01	0°-32'-13	minimum elong	-1700 Jul 09 j 16:54	1°☾28'42	0°00'14
minimum elong	-1707 Jun 23 j 22:28	16°II02'01	0°32'11	behind sun begin	-1700 Jul 09 j 10:24	1°☾28'08	
max. Earth dist.	-1707 Jun 23 j 08:16	16°II00'42	31.06680 AU	behind sun end	-1700 Jul 09 j 23:24	1°☾29'16	
retrograde	-1707 Oct 05 j 21:21	18°II31'08		max. Earth dist.	-1700 Jul 08 j 22:13	1°☾26'59	31.13767 AU
opposition	-1707 Dec 22 j 03:37	17°II08'07	0°-32'-1	retrograde	-1700 Oct 21 j 02:26	3°☾56'49	
min. Earth dist.	-1707 Dec 22 j 15:45	17°II07'15	29.07082 AU	opposition	-1699 Jan 06 j 02:54	2°☾34'22	0°02'40
direct	-1706 Mar 11 j 17:03	15°II42'54		min. Earth dist.	-1699 Jan 06 j 18:51	2°☾33'15	29.14344 AU
				direct	-1699 Mar 27 j 05:34	1°☾09'11	
conjunction	-1706 Jun 26 j 11:34	18°II14'40	0°-27'-40	max. Earth dist.	-1699 Jul 11 j 10:49	3°☾39'24	31.14862 AU
minimum elong	-1706 Jun 26 j 11:34	18°II14'40	0°27'39				
max. Earth dist.	-1706 Jun 25 j 20:35	18°II13'17	31.07459 AU	conjunction	-1699 Jul 12 j 05:42	3°☾41'08	0°04'57
retrograde	-1706 Oct 08 j 07:21	20°II43'37		minimum elong	-1699 Jul 12 j 05:42	3°☾41'08	0°04'59
opposition	-1706 Dec 24 j 13:51	19°II20'38	0°-27'-9	behind sun begin	-1699 Jul 11 j 23:18	3°☾40'34	
min. Earth dist.	-1706 Dec 25 j 03:25	19°II19'41	29.07888 AU	behind sun end	-1699 Jul 12 j 12:05	3°☾41'42	
direct	-1705 Mar 14 j 03:51	17°II55'22		retrograde	-1699 Oct 23 j 10:45	6°☾09'08	
max. Earth dist.	-1705 Jun 28 j 09:35	20°II25'44	31.08298 AU	opposition	-1698 Jan 08 j 13:21	4°☾46'47	0°07'40
				min. Earth dist.	-1698 Jan 09 j 07:07	4°☾45'32	29.15397 AU
conjunction	-1705 Jun 29 j 00:43	20°II27'08	0°-23'-5	direct	-1698 Mar 29 j 16:26	3°☾21'36	
minimum elong	-1705 Jun 29 j 00:43	20°II27'08	0°23'04				
retrograde	-1705 Oct 10 j 17:58	22°II55'54		conjunction	-1698 Jul 14 j 18:14	5°☾53'33	0°09'35
opposition	-1705 Dec 26 j 23:52	21°II32'58	0°-22'-14	minimum elong	-1698 Jul 14 j 18:14	5°☾53'33	0°09'37
min. Earth dist.	-1705 Dec 27 j 13:20	21°II32'02	29.08757 AU	behind sun begin	-1698 Jul 14 j 12:50	5°☾53'04	
direct	-1704 Mar 15 j 17:01	20°II07'41		behind sun end	-1698 Jul 14 j 23:37	5°☾54'02	
				max. Earth dist.	-1698 Jul 13 j 22:13	5°☾51'42	31.15859 AU
conjunction	-1704 Jun 30 j 13:42	22°II39'28	0°-18'-28	retrograde	-1698 Oct 25 j 20:56	8°☾21'25	
minimum elong	-1704 Jun 30 j 13:42	22°II39'28	0°18'28	opposition	-1697 Jan 10 j 23:42	6°☾59'07	0°12'38
max. Earth dist.	-1704 Jun 29 j 21:12	22°II37'56	31.09218 AU	min. Earth dist.	-1697 Jan 11 j 17:20	6°☾57'53	29.16324 AU
retrograde	-1704 Oct 12 j 06:03	25°II08'04		direct	-1697 Apr 01 j 04:57	5°☾33'56	
opposition	-1704 Dec 28 j 10:06	23°II45'12	0°-17'-17	max. Earth dist.	-1697 Jul 16 j 09:54	8°☾03'56	31.16716 AU
min. Earth dist.	-1704 Dec 29 j 00:13	23°II44'13	29.09743 AU				
direct	-1703 Mar 18 j 04:58	22°II19'54		conjunction	-1697 Jul 17 j 06:52	8°☾05'52	0°14'13
max. Earth dist.	-1703 Jul 02 j 10:41	24°II50'15	31.10260 AU	minimum elong	-1697 Jul 17 j 06:52	8°☾05'52	0°14'16
				behind sun begin	-1697 Jul 17 j 03:54	8°☾05'36	
conjunction	-1703 Jul 03 j 02:33	24°II51'43	0°-13'-50	behind sun end	-1697 Jul 17 j 09:50	8°☾06'08	
minimum elong	-1703 Jul 03 j 02:33	24°II51'43	0°13'49	retrograde	-1697 Oct 28 j 06:39	10°☾33'36	
behind sun begin	-1703 Jul 02 j 23:15	24°II51'25		opposition	-1696 Jan 13 j 10:05	9°☾11'21	0°17'35
behind sun end	-1703 Jul 03 j 05:51	24°II52'00		min. Earth dist.	-1696 Jan 14 j 05:17	9°☾10'01	29.17131 AU

Attention, astronomical year style is used: The year -1696 in astronomical counting style is the year 1697 BCE in historical counting style.

direct	-1696 Apr 02 j 14:45	7° \mathring{U} 46'07		minimum elong	-1688 Aug 05 j 17:34	27° \mathring{U} 48'39	0°54'08
				max. Earth dist.	-1688 Aug 04 j 18:00	27° \mathring{U} 46'27	31.23820 AU
conjunction	-1696 Jul 18 j 19:22	10° \mathring{U} 18'02	0°18'50		-1688 Oct 17 j 03:30	0° \mathring{U}	
minimum elong	-1696 Jul 18 j 19:22	10° \mathring{U} 18'02	0°18'51	retrograde	-1688 Nov 16 j 01:34	0° \mathring{U} 15'20	
max. Earth dist.	-1696 Jul 17 j 22:06	10° \mathring{U} 16'04	31.17470 AU		-1688 Dec 16 j 13:05	30° \mathring{R} \mathring{U}	
retrograde	-1696 Oct 29 j 16:27	12° \mathring{U} 45'38		opposition	-1687 Feb 01 j 08:07	28° \mathring{U} 53'24	0°59'58
opposition	-1695 Jan 14 j 20:31	11° \mathring{U} 23'24	0°22'31	min. Earth dist.	-1687 Feb 02 j 05:55	28° \mathring{U} 51'54	29.24378 AU
min. Earth dist.	-1695 Jan 15 j 15:48	11° \mathring{U} 22'03	29.17831 AU	direct	-1687 Apr 23 j 03:08	27° \mathring{U} 28'10	
direct	-1695 Apr 05 j 04:20	9° \mathring{U} 58'08		max. Earth dist.	-1687 Aug 07 j 05:32	29° \mathring{U} 57'37	31.24805 AU
max. Earth dist.	-1695 Jul 20 j 08:48	12° \mathring{U} 27'54	31.18131 AU				
				conjunction	-1687 Aug 08 j 04:53	29° \mathring{U} 59'47	0°58'14
conjunction	-1695 Jul 21 j 07:28	12° \mathring{U} 30'00	0°23'25	minimum elong	-1687 Aug 08 j 04:53	29° \mathring{U} 59'47	0°58'16
minimum elong	-1695 Jul 21 j 07:27	12° \mathring{U} 30'00	0°23'27		-1687 Aug 08 j 07:11	0° \mathring{U}	
retrograde	-1695 Nov 01 j 03:35	14° \mathring{U} 57'27		retrograde	-1687 Nov 18 j 11:08	2° \mathring{U} 26'26	
opposition	-1694 Jan 17 j 06:54	13° \mathring{U} 35'13	0°27'24	opposition	-1686 Feb 03 j 18:49	1° \mathring{U} 04'34	1°04'19
min. Earth dist.	-1694 Jan 18 j 02:55	13° \mathring{U} 33'49	29.18478 AU	min. Earth dist.	-1686 Feb 04 j 16:32	1° \mathring{U} 03'04	29.25318 AU
direct	-1694 Apr 07 j 16:11	12° \mathring{U} 09'55			-1686 Mar 20 j 00:34	30° \mathring{R} \mathring{U}	
				direct	-1686 Apr 25 j 16:01	29° \mathring{U} 39'22	
conjunction	-1694 Jul 23 j 19:38	14° \mathring{U} 41'44	0°27'58		-1686 May 31 j 17:31	0° \mathring{U}	
minimum elong	-1694 Jul 23 j 19:38	14° \mathring{U} 41'44	0°27'59				
max. Earth dist.	-1694 Jul 22 j 21:32	14° \mathring{U} 39'41	31.18759 AU	conjunction	-1686 Aug 10 j 16:15	2° \mathring{U} 10'59	1°02'16
retrograde	-1694 Nov 03 j 12:49	17° \mathring{U} 09'01		minimum elong	-1686 Aug 10 j 16:15	2° \mathring{U} 10'59	1°02'16
opposition	-1693 Jan 19 j 17:11	15° \mathring{U} 46'47	0°32'14	max. Earth dist.	-1686 Aug 09 j 15:39	2° \mathring{U} 08'42	31.25690 AU
min. Earth dist.	-1693 Jan 20 j 13:52	15° \mathring{U} 45'21	29.19100 AU	retrograde	-1686 Nov 20 j 22:24	4° \mathring{U} 37'35	
direct	-1693 Apr 10 j 05:34	14° \mathring{U} 21'26		opposition	-1685 Feb 06 j 05:29	3° \mathring{U} 15'46	1°08'35
max. Earth dist.	-1693 Jul 25 j 08:04	16° \mathring{U} 51'02	31.19394 AU	min. Earth dist.	-1685 Feb 07 j 03:46	3° \mathring{U} 14'14	29.26161 AU
				direct	-1685 Apr 28 j 02:40	1° \mathring{U} 50'36	
conjunction	-1693 Jul 26 j 07:33	16° \mathring{U} 53'12	0°32'28	max. Earth dist.	-1685 Aug 12 j 03:40	4° \mathring{U} 19'58	31.26460 AU
minimum elong	-1693 Jul 26 j 07:33	16° \mathring{U} 53'12	0°32'30				
retrograde	-1693 Nov 06 j 00:16	19° \mathring{U} 20'20		conjunction	-1685 Aug 13 j 03:43	4° \mathring{U} 22'12	1°06'12
opposition	-1692 Jan 22 j 03:32	17° \mathring{U} 58'07	0°37'01	minimum elong	-1685 Aug 13 j 03:42	4° \mathring{U} 22'12	1°06'13
min. Earth dist.	-1692 Jan 22 j 23:57	17° \mathring{U} 56'42	29.19769 AU	retrograde	-1685 Nov 23 j 07:49	6° \mathring{U} 48'45	
direct	-1692 Apr 11 j 17:23	16° \mathring{U} 32'44		opposition	-1684 Feb 08 j 16:25	5° \mathring{U} 26'58	1°12'44
				min. Earth dist.	-1684 Feb 09 j 15:23	5° \mathring{U} 25'23	29.26863 AU
conjunction	-1692 Jul 27 j 19:22	19° \mathring{U} 04'27	0°36'55	direct	-1684 Apr 29 j 15:19	4° \mathring{U} 01'50	
minimum elong	-1692 Jul 27 j 19:21	19° \mathring{U} 04'27	0°36'56				
max. Earth dist.	-1692 Jul 26 j 20:52	19° \mathring{U} 02'22	31.20087 AU	conjunction	-1684 Aug 14 j 14:48	6° \mathring{U} 33'23	1°10'03
retrograde	-1692 Nov 07 j 09:53	21° \mathring{U} 31'27		minimum elong	-1684 Aug 14 j 14:47	6° \mathring{U} 33'23	1°10'03
opposition	-1691 Jan 23 j 14:03	20° \mathring{U} 09'16	0°41'44	max. Earth dist.	-1684 Aug 13 j 13:22	6° \mathring{U} 31'01	31.27098 AU
min. Earth dist.	-1691 Jan 24 j 11:17	20° \mathring{U} 07'47	29.20514 AU	retrograde	-1684 Nov 24 j 19:35	8° \mathring{U} 59'52	
direct	-1691 Apr 14 j 06:44	18° \mathring{U} 43'52		opposition	-1683 Feb 10 j 03:18	7° \mathring{U} 38'07	1°16'47
max. Earth dist.	-1691 Jul 29 j 07:28	21° \mathring{U} 13'22	31.20893 AU	min. Earth dist.	-1683 Feb 11 j 01:59	7° \mathring{U} 36'33	29.27451 AU
				direct	-1683 May 02 j 03:02	6° \mathring{U} 12'59	
conjunction	-1691 Jul 30 j 06:57	21° \mathring{U} 15'32	0°41'19	max. Earth dist.	-1683 Aug 16 j 01:24	8° \mathring{U} 42'12	31.27621 AU
minimum elong	-1691 Jul 30 j 06:57	21° \mathring{U} 15'32	0°41'21				
retrograde	-1691 Nov 09 j 21:15	23° \mathring{U} 42'26		conjunction	-1683 Aug 17 j 02:00	8° \mathring{U} 44'29	1°13'47
opposition	-1690 Jan 26 j 00:24	22° \mathring{U} 20'17	0°46'24	minimum elong	-1683 Aug 17 j 02:00	8° \mathring{U} 44'29	1°13'49
min. Earth dist.	-1690 Jan 26 j 20:41	22° \mathring{U} 18'52	29.21383 AU	retrograde	-1683 Nov 27 j 05:33	11° \mathring{U} 10'54	
direct	-1690 Apr 16 j 19:00	20° \mathring{U} 54'54		opposition	-1682 Feb 12 j 14:11	9° \mathring{U} 49'10	1°20'43
				min. Earth dist.	-1682 Feb 13 j 13:57	9° \mathring{U} 47'31	29.27933 AU
conjunction	-1690 Aug 01 j 18:33	23° \mathring{U} 26'33	0°45'39	direct	-1682 May 04 j 16:38	8° \mathring{U} 24'02	
minimum elong	-1690 Aug 01 j 18:33	23° \mathring{U} 26'33	0°45'40	max. Earth dist.	-1682 Aug 18 j 11:14	10° \mathring{U} 53'05	31.28067 AU
max. Earth dist.	-1690 Jul 31 j 19:38	23° \mathring{U} 24'26	31.21808 AU				
retrograde	-1690 Nov 12 j 05:38	25° \mathring{U} 53'22		conjunction	-1682 Aug 19 j 12:53	10° \mathring{U} 55'28	1°17'25
opposition	-1689 Jan 28 j 10:56	24° \mathring{U} 31'17	0°51'00	minimum elong	-1682 Aug 19 j 12:52	10° \mathring{U} 55'28	1°17'26
min. Earth dist.	-1689 Jan 29 j 08:23	24° \mathring{U} 29'47	29.22347 AU	retrograde	-1682 Nov 29 j 16:55	13° \mathring{U} 21'49	
direct	-1689 Apr 19 j 05:54	23° \mathring{U} 05'56		opposition	-1681 Feb 15 j 01:01	12° \mathring{U} 00'04	1°24'33
max. Earth dist.	-1689 Aug 03 j 06:44	25° \mathring{U} 35'24	31.22809 AU	min. Earth dist.	-1681 Feb 15 j 23:55	11° \mathring{U} 58'29	29.28351 AU
				direct	-1681 May 07 j 05:36	10° \mathring{U} 34'55	
conjunction	-1689 Aug 04 j 06:03	25° \mathring{U} 37'34	0°49'55				
minimum elong	-1689 Aug 04 j 06:03	25° \mathring{U} 37'34	0°49'57	conjunction	-1681 Aug 21 j 23:45	13° \mathring{U} 06'18	1°20'56
retrograde	-1689 Nov 14 j 15:39	28° \mathring{U} 04'18		minimum elong	-1681 Aug 21 j 23:45	13° \mathring{U} 06'18	1°20'58
opposition	-1688 Jan 30 j 21:22	26° \mathring{U} 42'18	0°55'31	max. Earth dist.	-1681 Aug 20 j 22:41	13° \mathring{U} 03'58	31.28458 AU
min. Earth dist.	-1688 Jan 31 j 18:10	26° \mathring{U} 40'52	29.23361 AU		-1681 Oct 18 j 22:35	15° \mathring{U}	
direct	-1688 Apr 20 j 17:53	25° \mathring{U} 17'00		retrograde	-1681 Dec 02 j 01:01	15° \mathring{U} 32'34	
					-1680 Jan 16 j 12:40	15° \mathring{R} \mathring{U}	
conjunction	-1688 Aug 05 j 17:34	27° \mathring{U} 48'39	0°54'07	opposition	-1680 Feb 17 j 12:01	14° \mathring{U} 10'49	1°28'14

Attention, astronomical year style is used: The year -1680 in astronomical counting style is the year 1681 BCE in historical counting style.

min. Earth dist.	-1680 Feb 18 j 11:56	14°09'10	29.28754 AU	minimum elong	-1673 Sep 08 j 10:52	0°03'107	1°44'30
direct	-1680 May 08 j 17:11	12°045'40		retrograde	-1673 Dec 19 j 10:37	2°05'5721	
	-1680 Aug 15 j 20:12	15°00		opposition	-1672 Mar 06 j 05:39	1°03'35'45	1°52'49
max. Earth dist.	-1680 Aug 22 j 09:22	15°014'38	31.28878 AU	min. Earth dist.	-1672 Mar 07 j 03:17	1°03'34'17	29.33369 AU
				direct	-1672 May 26 j 13:42	0°03'10'59	
conjunction	-1680 Aug 23 j 10:23	15°016'58	1°24'20				
minimum elong	-1680 Aug 23 j 10:23	15°016'58	1°24'21	conjunction	-1672 Sep 09 j 21:10	2°03'41'51	1°46'47
retrograde	-1680 Dec 03 j 10:39	17°043'11		minimum elong	-1672 Sep 09 j 21:09	2°03'41'51	1°46'48
opposition	-1679 Feb 18 j 23:00	16°021'25	1°31'48	max. Earth dist.	-1672 Sep 08 j 21:56	2°03'39'41	31.33380 AU
min. Earth dist.	-1679 Feb 19 j 21:45	16°019'51	29.29203 AU	retrograde	-1672 Dec 20 j 20:00	5°03'08'05	
	-1679 Apr 25 j 20:49	15°000		opposition	-1671 Mar 08 j 17:23	3°03'46'29	1°55'12
direct	-1679 May 11 j 05:48	14°056'17		min. Earth dist.	-1671 Mar 09 j 16:01	3°03'44'56	29.33625 AU
	-1679 May 26 j 08:36	15°00		direct	-1671 May 29 j 01:36	2°03'21'44	
				max. Earth dist.	-1671 Sep 11 j 07:58	4°03'50'20	31.33563 AU
conjunction	-1679 Aug 25 j 20:49	17°027'30	1°27'36				
minimum elong	-1679 Aug 25 j 20:49	17°027'30	1°27'38	conjunction	-1671 Sep 12 j 07:12	4°03'52'30	1°48'56
max. Earth dist.	-1679 Aug 24 j 20:02	17°025'12	31.29358 AU	minimum elong	-1671 Sep 12 j 07:12	4°03'52'30	1°48'57
retrograde	-1679 Dec 05 j 20:10	19°053'42		retrograde	-1671 Dec 23 j 06:10	7°03'18'44	
opposition	-1678 Feb 21 j 10:04	18°031'57	1°35'14	opposition	-1670 Mar 11 j 04:56	5°03'57'07	1°57'26
min. Earth dist.	-1678 Feb 22 j 09:12	18°030'21	29.29745 AU	min. Earth dist.	-1670 Mar 12 j 02:40	5°03'55'38	29.33727 AU
direct	-1678 May 13 j 15:24	17°006'50		direct	-1670 May 31 j 15:03	4°03'32'23	
max. Earth dist.	-1678 Aug 27 j 07:26	19°035'46	31.29944 AU				
				conjunction	-1670 Sep 14 j 17:16	7°03'03'03	1°50'57
conjunction	-1678 Aug 28 j 07:21	19°037'59	1°30'45	minimum elong	-1670 Sep 14 j 17:16	7°03'03'03	1°50'57
minimum elong	-1678 Aug 28 j 07:20	19°037'59	1°30'46	max. Earth dist.	-1670 Sep 13 j 17:53	7°03'00'52	31.33593 AU
retrograde	-1678 Dec 08 j 04:39	22°004'09		retrograde	-1670 Dec 25 j 15:56	9°03'29'18	
opposition	-1677 Feb 23 j 20:59	20°042'26	1°38'32	opposition	-1669 Mar 13 j 16:31	8°03'07'37	1°59'29
min. Earth dist.	-1677 Feb 24 j 19:24	20°040'54	29.30367 AU	min. Earth dist.	-1669 Mar 14 j 14:49	8°03'06'06	29.33713 AU
direct	-1677 May 16 j 04:09	19°017'22		direct	-1669 Jun 03 j 01:45	6°03'42'54	
				max. Earth dist.	-1669 Sep 16 j 04:50	9°03'11'22	31.33535 AU
conjunction	-1677 Aug 30 j 17:44	21°048'29	1°33'47				
minimum elong	-1677 Aug 30 j 17:44	21°048'29	1°33'48	conjunction	-1669 Sep 17 j 03:14	9°03'13'28	1°52'47
max. Earth dist.	-1677 Aug 29 j 17:17	21°046'12	31.30603 AU	minimum elong	-1669 Sep 17 j 03:14	9°03'13'28	1°52'48
retrograde	-1677 Dec 10 j 15:24	24°014'40		retrograde	-1669 Dec 28 j 00:19	11°03'39'43	
opposition	-1676 Feb 26 j 08:09	22°052'58	1°41'42	opposition	-1668 Mar 15 j 04:14	10°03'18'00	2°01'22
min. Earth dist.	-1676 Feb 27 j 06:23	22°051'27	29.31065 AU	min. Earth dist.	-1668 Mar 16 j 01:47	10°03'16'32	29.33619 AU
direct	-1676 May 17 j 13:35	21°027'58		direct	-1668 Jun 04 j 14:51	8°03'53'17	
max. Earth dist.	-1676 Aug 31 j 04:58	23°056'53	31.31307 AU				
				conjunction	-1668 Sep 18 j 12:50	11°03'23'45	1°54'28
conjunction	-1676 Sep 01 j 04:04	23°059'03	1°36'40	minimum elong	-1668 Sep 18 j 12:49	11°03'23'45	1°54'28
minimum elong	-1676 Sep 01 j 04:04	23°059'03	1°36'41	max. Earth dist.	-1668 Sep 17 j 14:03	11°03'21'36	31.33428 AU
retrograde	-1676 Dec 12 j 00:40	26°025'14		retrograde	-1668 Dec 29 j 10:44	13°03'50'01	
opposition	-1675 Feb 27 j 19:29	25°003'35	1°44'42	opposition	-1667 Mar 17 j 15:58	12°03'28'14	2°03'05
min. Earth dist.	-1675 Feb 28 j 17:54	25°002'03	29.31762 AU	min. Earth dist.	-1667 Mar 18 j 12:59	12°03'26'48	29.33529 AU
direct	-1675 May 20 j 01:02	23°038'39		direct	-1667 Jun 07 j 00:38	11°03'03'32	
conjunction	-1675 Sep 03 j 14:18	26°009'41	1°39'25	conjunction	-1667 Sep 20 j 22:34	13°03'33'54	1°55'59
minimum elong	-1675 Sep 03 j 14:18	26°009'41	1°39'26	minimum elong	-1667 Sep 20 j 22:34	13°03'33'54	1°56'00
max. Earth dist.	-1675 Sep 02 j 14:21	26°007'27	31.31987 AU	max. Earth dist.	-1667 Sep 20 j 01:30	13°03'31'55	31.33349 AU
retrograde	-1675 Dec 14 j 12:38	28°035'53		retrograde	-1667 Dec 31 j 19:32	16°03'00'12	
opposition	-1674 Mar 02 j 06:38	27°014'16	1°47'34	opposition	-1666 Mar 20 j 03:37	14°03'38'23	2°04'37
min. Earth dist.	-1674 Mar 03 j 04:25	27°012'47	29.32421 AU	min. Earth dist.	-1666 Mar 21 j 00:24	14°03'36'58	29.33479 AU
direct	-1674 May 22 j 12:12	25°049'24		direct	-1666 Jun 09 j 12:00	13°03'13'42	
max. Earth dist.	-1674 Sep 05 j 01:48	28°018'15	31.32585 AU	max. Earth dist.	-1666 Sep 22 j 10:42	15°03'41'59	31.33340 AU
conjunction	-1674 Sep 06 j 00:42	28°020'23	1°42'01	conjunction	-1666 Sep 23 j 08:06	15°03'44'00	1°57'20
minimum elong	-1674 Sep 06 j 00:41	28°020'23	1°42'02	minimum elong	-1666 Sep 23 j 08:06	15°03'44'00	1°57'20
	-1674 Oct 24 j 17:08	0°00		retrograde	-1665 Jan 03 j 07:19	18°03'10'21	
retrograde	-1674 Dec 16 j 23:03	0°0046'37		opposition	-1665 Mar 22 j 15:21	16°03'48'31	2°05'58
	-1673 Feb 10 j 16:24	30°000		min. Earth dist.	-1665 Mar 23 j 10:44	16°03'47'13	29.33517 AU
opposition	-1673 Mar 04 j 18:11	29°025'00	1°50'16	direct	-1665 Jun 11 j 22:55	15°03'23'54	
min. Earth dist.	-1673 Mar 05 j 16:50	29°023'28	29.32963 AU				
direct	-1673 May 25 j 01:11	28°000'12		conjunction	-1665 Sep 25 j 17:40	17°03'54'08	1°58'31
	-1673 Aug 25 j 11:35	0°00		minimum elong	-1665 Sep 25 j 17:40	17°03'54'08	1°58'32
max. Earth dist.	-1673 Sep 07 j 11:11	0°0028'55	31.33060 AU	max. Earth dist.	-1665 Sep 24 j 22:00	17°03'52'17	31.33410 AU
				retrograde	-1664 Jan 05 j 17:51	20°03'20'34	
conjunction	-1673 Sep 08 j 10:52	0°0031'07	1°44'29	opposition	-1664 Mar 24 j 03:19	18°03'58'44	2°07'09

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Attention, astronomical year style is used: The year -1664 in astronomical counting style is the year 1665 BCE in historical counting style.

min. Earth dist.	-1664 Mar 24 j 22:50	18° \mathring{M} 57'24	29.33622 AU	min. Earth dist.	-1656 Apr 11 j 19:30	6° \mathring{A} 22'36	29.32441 AU
direct	-1664 Jun 13 j 11:02	17° \mathring{M} 34'11		direct	-1656 Jul 01 j 08:33	4° \mathring{A} 59'27	
max. Earth dist.	-1664 Sep 26 j 07:27	20° \mathring{M} 02'31	31.33553 AU				
conjunction	-1664 Sep 27 j 03:06	20° \mathring{M} 04'21	1°59'32	conjunction	-1656 Oct 14 j 06:14	7° \mathring{A} 28'57	2°01'27
minimum elong	-1664 Sep 27 j 03:06	20° \mathring{M} 04'21	1°59'33	minimum elong	-1656 Oct 14 j 06:14	7° \mathring{A} 28'57	2°01'27
retrograde	-1663 Jan 07 j 05:43	22° \mathring{M} 30'53		max. Earth dist.	-1656 Oct 13 j 15:24	7° \mathring{A} 27'33	31.32000 AU
opposition	-1663 Mar 26 j 15:08	21° \mathring{M} 09'03	2°08'09	retrograde	-1655 Jan 24 j 15:13	9° \mathring{A} 56'09	
min. Earth dist.	-1663 Mar 27 j 08:58	21° \mathring{M} 07'51	29.33777 AU	opposition	-1655 Apr 13 j 17:00	8° \mathring{A} 33'59	2°09'28
direct	-1663 Jun 15 j 22:27	19° \mathring{M} 44'35		min. Earth dist.	-1655 Apr 14 j 08:02	8° \mathring{A} 32'58	29.31853 AU
				direct	-1655 Jul 03 j 19:57	7° \mathring{A} 09'49	
conjunction	-1663 Sep 29 j 12:32	22° \mathring{M} 14'44	2°00'23	conjunction	-1655 Oct 16 j 15:13	9° \mathring{A} 39'12	2°00'55
minimum elong	-1663 Sep 29 j 12:32	22° \mathring{M} 14'44	2°00'23	minimum elong	-1655 Oct 16 j 15:14	9° \mathring{A} 39'12	2°00'54
max. Earth dist.	-1663 Sep 28 j 17:51	22° \mathring{M} 12'58	31.33701 AU	max. Earth dist.	-1655 Oct 16 j 00:43	9° \mathring{A} 37'50	31.31427 AU
retrograde	-1662 Jan 09 j 15:46	24° \mathring{M} 41'22		retrograde	-1654 Jan 27 j 02:38	12° \mathring{A} 06'28	
opposition	-1662 Mar 29 j 03:11	23° \mathring{M} 19'32	2°08'57	opposition	-1654 Apr 16 j 05:17	10° \mathring{A} 44'12	2°08'48
min. Earth dist.	-1662 Mar 29 j 21:36	23° \mathring{M} 18'17	29.33916 AU	min. Earth dist.	-1654 Apr 16 j 18:17	10° \mathring{A} 43'20	29.31296 AU
direct	-1662 Jun 18 j 10:08	21° \mathring{M} 55'10		direct	-1654 Jul 06 j 07:13	9° \mathring{A} 20'03	
				max. Earth dist.	-1654 Oct 18 j 10:55	11° \mathring{A} 48'05	31.30899 AU
conjunction	-1662 Oct 01 j 21:59	24° \mathring{M} 25'14	2°01'03	conjunction	-1654 Oct 19 j 00:16	11° \mathring{A} 49'20	2°00'12
minimum elong	-1662 Oct 01 j 21:59	24° \mathring{M} 25'14	2°01'03	minimum elong	-1654 Oct 19 j 00:16	11° \mathring{A} 49'20	2°00'11
max. Earth dist.	-1662 Oct 01 j 03:51	24° \mathring{M} 23'32	31.33815 AU	retrograde	-1653 Jan 29 j 13:08	14° \mathring{A} 16'42	
retrograde	-1661 Jan 12 j 02:47	26° \mathring{M} 51'58		opposition	-1653 Apr 18 j 17:43	12° \mathring{A} 54'22	2°07'58
opposition	-1661 Mar 31 j 15:09	25° \mathring{M} 30'09	2°09'35	min. Earth dist.	-1653 Apr 19 j 06:43	12° \mathring{A} 53'29	29.30818 AU
min. Earth dist.	-1661 Apr 01 j 08:17	25° \mathring{M} 28'59	29.33982 AU	direct	-1653 Jul 08 j 19:07	11° \mathring{A} 30'15	
direct	-1661 Jun 20 j 23:37	24° \mathring{M} 05'51					
conjunction	-1661 Oct 04 j 07:29	26° \mathring{M} 35'53	2°01'33	conjunction	-1653 Oct 21 j 09:18	13° \mathring{A} 59'26	1°59'20
minimum elong	-1661 Oct 04 j 07:29	26° \mathring{M} 35'53	2°01'33	minimum elong	-1653 Oct 21 j 09:18	13° \mathring{A} 59'26	1°59'19
max. Earth dist.	-1661 Oct 03 j 13:25	26° \mathring{M} 34'11	31.33829 AU	max. Earth dist.	-1653 Oct 20 j 21:15	13° \mathring{A} 58'18	31.30483 AU
retrograde	-1660 Jan 14 j 13:33	29° \mathring{M} 02'42		retrograde	-1652 Feb 01 j 00:30	16° \mathring{A} 26'53	
opposition	-1660 Apr 02 j 03:26	27° \mathring{M} 40'52	2°10'01	opposition	-1652 Apr 20 j 06:09	15° \mathring{A} 04'31	2°06'56
min. Earth dist.	-1660 Apr 02 j 20:49	27° \mathring{M} 39'41	29.33951 AU	min. Earth dist.	-1652 Apr 20 j 17:09	15° \mathring{A} 03'46	29.30441 AU
direct	-1660 Jun 22 j 10:28	26° \mathring{M} 16'38		direct	-1652 Jul 10 j 08:16	13° \mathring{A} 40'28	
conjunction	-1660 Oct 05 j 16:53	28° \mathring{M} 46'35	2°01'52	conjunction	-1652 Oct 22 j 18:11	16° \mathring{A} 09'34	1°58'17
minimum elong	-1660 Oct 05 j 16:53	28° \mathring{M} 46'35	2°01'52	minimum elong	-1652 Oct 22 j 18:11	16° \mathring{A} 09'34	1°58'16
max. Earth dist.	-1660 Oct 05 j 00:00	28° \mathring{M} 45'00	31.33731 AU	max. Earth dist.	-1652 Oct 22 j 06:41	16° \mathring{A} 08'29	31.30154 AU
	-1660 Nov 08 j 17:00	0° \mathring{A}		retrograde	-1651 Feb 02 j 11:40	18° \mathring{A} 37'10	
retrograde	-1659 Jan 15 j 22:04	1° \mathring{A} 13'30		opposition	-1651 Apr 22 j 18:42	17° \mathring{A} 14'45	2°05'43
	-1659 Mar 30 j 11:52	30° \mathring{R} \mathring{M}		min. Earth dist.	-1651 Apr 23 j 05:21	17° \mathring{A} 14'02	29.30154 AU
opposition	-1659 Apr 04 j 15:42	29° \mathring{M} 51'38	2°10'17	direct	-1651 Jul 12 j 18:52	15° \mathring{A} 50'47	
min. Earth dist.	-1659 Apr 05 j 08:19	29° \mathring{M} 50'31	29.33773 AU				
direct	-1659 Jun 24 j 23:24	28° \mathring{M} 27'27		conjunction	-1651 Oct 25 j 03:16	18° \mathring{A} 19'50	1°57'04
	-1659 Sep 12 j 00:45	0° \mathring{A}		minimum elong	-1651 Oct 25 j 03:17	18° \mathring{A} 19'50	1°57'03
max. Earth dist.	-1659 Oct 07 j 08:46	0° \mathring{A} 55'39	31.33482 AU	max. Earth dist.	-1651 Oct 24 j 17:33	18° \mathring{A} 18'55	31.29895 AU
conjunction	-1659 Oct 08 j 02:18	0° \mathring{A} 57'18	2°02'01	retrograde	-1650 Feb 04 j 20:53	20° \mathring{A} 47'34	
minimum elong	-1659 Oct 08 j 02:19	0° \mathring{A} 57'18	2°02'01	opposition	-1650 Apr 25 j 07:05	19° \mathring{A} 25'09	2°04'20
retrograde	-1658 Jan 18 j 08:36	3° \mathring{A} 24'18		min. Earth dist.	-1650 Apr 25 j 16:32	19° \mathring{A} 24'31	29.29894 AU
opposition	-1658 Apr 07 j 03:51	2° \mathring{A} 02'23	2°10'21	direct	-1650 Jul 15 j 07:29	18° \mathring{A} 01'16	
min. Earth dist.	-1658 Apr 07 j 20:06	2° \mathring{A} 01'17	29.33458 AU	conjunction	-1650 Oct 27 j 12:15	20° \mathring{A} 30'16	1°55'40
direct	-1658 Jun 27 j 09:27	0° \mathring{A} 38'13		minimum elong	-1650 Oct 27 j 12:16	20° \mathring{A} 30'16	1°55'39
conjunction	-1658 Oct 10 j 11:50	3° \mathring{A} 07'59	2°02'00	max. Earth dist.	-1650 Oct 27 j 02:21	20° \mathring{A} 29'20	31.29645 AU
minimum elong	-1658 Oct 10 j 11:50	3° \mathring{A} 07'59	2°02'00	retrograde	-1649 Feb 07 j 08:22	22° \mathring{A} 58'09	
max. Earth dist.	-1658 Oct 09 j 19:44	3° \mathring{A} 06'28	31.33092 AU	opposition	-1649 Apr 27 j 19:46	21° \mathring{A} 35'44	2°02'45
retrograde	-1657 Jan 20 j 17:46	5° \mathring{A} 35'02		min. Earth dist.	-1649 Apr 28 j 04:21	21° \mathring{A} 35'09	29.29635 AU
opposition	-1657 Apr 09 j 16:15	4° \mathring{A} 13'04	2°10'14	direct	-1649 Jul 17 j 17:35	20° \mathring{A} 11'56	
min. Earth dist.	-1657 Apr 10 j 08:27	4° \mathring{A} 11'58	29.32993 AU	conjunction	-1649 Oct 29 j 21:20	22° \mathring{A} 40'53	1°54'07
direct	-1657 Jun 29 j 21:29	2° \mathring{A} 48'55		minimum elong	-1649 Oct 29 j 21:21	22° \mathring{A} 40'53	1°54'06
conjunction	-1657 Oct 12 j 20:58	5° \mathring{A} 18'32	2°01'49	max. Earth dist.	-1649 Oct 29 j 13:19	22° \mathring{A} 40'08	31.29359 AU
minimum elong	-1657 Oct 12 j 20:58	5° \mathring{A} 18'33	2°01'49	retrograde	-1648 Feb 09 j 18:17	25° \mathring{A} 08'57	
max. Earth dist.	-1657 Oct 12 j 04:30	5° \mathring{A} 17'00	31.32582 AU	opposition	-1648 Apr 29 j 08:37	23° \mathring{A} 46'30	2°01'00
retrograde	-1656 Jan 23 j 05:07	7° \mathring{A} 45'40		min. Earth dist.	-1648 Apr 29 j 16:53	23° \mathring{A} 45'56	29.29306 AU
opposition	-1656 Apr 11 j 04:36	6° \mathring{A} 23'36	2°09'57	direct	-1648 Jul 19 j 05:23	22° \mathring{A} 22'48	

Attention, astronomical year style is used: The year -1648 in astronomical counting style is the year 1649 BCE in historical counting style.

conjunction	-1648 Oct 31 j 06:26	24° $\underline{\Delta}$ 51'41	1°52'23	conjunction	-1640 Nov 17 j 07:21	12° \mathbb{M} 19'31	1°33'05
minimum elong	-1648 Oct 31 j 06:26	24° $\underline{\Delta}$ 51'41	1°52'22	minimum elong	-1640 Nov 17 j 07:22	12° \mathbb{M} 19'31	1°33'03
max. Earth dist.	-1648 Oct 30 j 22:12	24° $\underline{\Delta}$ 50'54	31.28996 AU	max. Earth dist.	-1640 Nov 17 j 06:58	12° \mathbb{M} 19'29	31.22970 AU
retrograde	-1647 Feb 11 j 06:22	27° $\underline{\Delta}$ 19'54		retrograde	-1639 Mar 01 j 00:22	14° \mathbb{M} 48'49	
opposition	-1647 May 01 j 21:18	25° $\underline{\Delta}$ 57'26	1°59'04	opposition	-1639 May 20 j 04:28	13° \mathbb{M} 25'45	1°37'49
min. Earth dist.	-1647 May 02 j 04:15	25° $\underline{\Delta}$ 56'58	29.28889 AU	min. Earth dist.	-1639 May 20 j 04:48	13° \mathbb{M} 25'43	29.22725 AU
direct	-1647 Jul 21 j 15:38	24° $\underline{\Delta}$ 33'47		direct	-1639 Aug 08 j 13:46	12° \mathbb{M} 02'22	
conjunction	-1647 Nov 02 j 15:41	27° $\underline{\Delta}$ 02'38	1°50'30	conjunction	-1639 Nov 19 j 16:24	14° \mathbb{M} 30'32	1°30'01
minimum elong	-1647 Nov 02 j 15:42	27° $\underline{\Delta}$ 02'38	1°50'29	minimum elong	-1639 Nov 19 j 16:24	14° \mathbb{M} 30'32	1°30'00
max. Earth dist.	-1647 Nov 02 j 08:46	27° $\underline{\Delta}$ 01'58	31.28508 AU	max. Earth dist.	-1639 Nov 19 j 16:14	14° \mathbb{M} 30'32	31.22348 AU
retrograde	-1646 Feb 13 j 17:17	29° $\underline{\Delta}$ 31'00			-1639 Dec 02 j 17:12	15° \mathbb{M}	
opposition	-1646 May 04 j 10:14	28° $\underline{\Delta}$ 08'29	1°56'58	retrograde	-1638 Mar 03 j 11:54	17° \mathbb{M} 00'00	
min. Earth dist.	-1646 May 04 j 17:29	28° $\underline{\Delta}$ 08'00	29.28328 AU	opposition	-1638 May 22 j 17:23	15° \mathbb{M} 36'54	1°34'29
direct	-1646 Jul 24 j 02:20	26° $\underline{\Delta}$ 44'55		min. Earth dist.	-1638 May 22 j 15:59	15° \mathbb{M} 37'00	29.22123 AU
conjunction	-1646 Nov 05 j 00:50	29° $\underline{\Delta}$ 13'40	1°48'27		-1638 Jun 15 j 07:37	15° \mathbb{R} \mathbb{M}	
minimum elong	-1646 Nov 05 j 00:50	29° $\underline{\Delta}$ 13'40	1°48'26	direct	-1638 Aug 11 j 00:02	14° \mathbb{M} 13'35	
max. Earth dist.	-1646 Nov 04 j 18:02	29° $\underline{\Delta}$ 13'02	31.27886 AU		-1638 Oct 03 j 16:38	15° \mathbb{M}	
retrograde	-1646 Nov 25 j 18:32	0° \mathbb{M}		conjunction	-1638 Nov 22 j 01:31	16° \mathbb{M} 41'43	1°26'49
opposition	-1645 Feb 16 j 05:24	1° \mathbb{M} 42'11		minimum elong	-1638 Nov 22 j 01:31	16° \mathbb{M} 41'43	1°26'48
min. Earth dist.	-1645 May 06 j 23:03	0° \mathbb{M} 19'37	1°54'43	max. Earth dist.	-1638 Nov 22 j 03:01	16° \mathbb{M} 41'51	31.21757 AU
direct	-1645 May 07 j 04:34	0° \mathbb{M} 19'14	29.27624 AU	retrograde	-1637 Mar 05 j 22:34	19° \mathbb{M} 11'21	
	-1645 May 19 j 04:52	30° \mathbb{R} $\underline{\Delta}$		opposition	-1637 May 25 j 06:32	17° \mathbb{M} 48'13	1°31'00
	-1645 Jul 26 j 13:09	28° $\underline{\Delta}$ 56'04		min. Earth dist.	-1637 May 25 j 05:04	17° \mathbb{M} 48'19	29.21534 AU
	-1645 Sep 28 j 15:24	0° \mathbb{M}		direct	-1637 Aug 13 j 10:21	16° \mathbb{M} 24'58	
conjunction	-1645 Nov 07 j 10:02	1° \mathbb{M} 24'45	1°46'16	conjunction	-1637 Nov 24 j 10:44	18° \mathbb{M} 53'03	1°23'30
minimum elong	-1645 Nov 07 j 10:03	1° \mathbb{M} 24'45	1°46'15	minimum elong	-1637 Nov 24 j 10:45	18° \mathbb{M} 53'03	1°23'28
max. Earth dist.	-1645 Nov 07 j 03:55	1° \mathbb{M} 24'10	31.27119 AU	max. Earth dist.	-1637 Nov 24 j 12:52	18° \mathbb{M} 53'15	31.21179 AU
retrograde	-1644 Feb 18 j 17:03	3° \mathbb{M} 53'24		retrograde	-1636 Mar 07 j 11:15	21° \mathbb{M} 22'52	
opposition	-1644 May 08 j 12:05	2° \mathbb{M} 30'44	1°52'17	opposition	-1636 May 26 j 19:34	19° \mathbb{M} 59'41	1°27'22
min. Earth dist.	-1644 May 08 j 17:55	2° \mathbb{M} 30'21	29.26804 AU	min. Earth dist.	-1636 May 26 j 16:10	19° \mathbb{M} 59'55	29.20931 AU
direct	-1644 Jul 28 j 01:09	1° \mathbb{M} 07'13		direct	-1636 Aug 14 j 20:53	18° \mathbb{M} 36'30	
conjunction	-1644 Nov 08 j 19:08	3° \mathbb{M} 35'48	1°43'55	conjunction	-1636 Nov 25 j 20:01	21° \mathbb{M} 04'32	1°20'03
minimum elong	-1644 Nov 08 j 19:09	3° \mathbb{M} 35'48	1°43'53	minimum elong	-1636 Nov 25 j 20:02	21° \mathbb{M} 04'32	1°20'01
max. Earth dist.	-1644 Nov 08 j 14:12	3° \mathbb{M} 35'20	31.26266 AU	max. Earth dist.	-1636 Nov 25 j 22:49	21° \mathbb{M} 04'48	31.20542 AU
retrograde	-1643 Feb 20 j 05:24	6° \mathbb{M} 04'33		retrograde	-1635 Mar 09 j 23:41	23° \mathbb{M} 34'33	
opposition	-1643 May 11 j 00:54	4° \mathbb{M} 41'48	1°49'42	opposition	-1635 May 29 j 08:49	22° \mathbb{M} 11'19	1°23'37
min. Earth dist.	-1643 May 11 j 05:03	4° \mathbb{M} 41'31	29.25905 AU	min. Earth dist.	-1635 May 29 j 05:45	22° \mathbb{M} 11'31	29.20253 AU
direct	-1643 Jul 30 j 14:27	3° \mathbb{M} 18'17		direct	-1635 Aug 17 j 07:50	20° \mathbb{M} 48'11	
conjunction	-1643 Nov 11 j 04:10	5° \mathbb{M} 46'47	1°41'25	conjunction	-1635 Nov 28 j 05:32	23° \mathbb{M} 16'11	1°16'28
minimum elong	-1643 Nov 11 j 04:10	5° \mathbb{M} 46'47	1°41'24	minimum elong	-1635 Nov 28 j 05:32	23° \mathbb{M} 16'11	1°16'27
max. Earth dist.	-1643 Nov 10 j 23:30	5° \mathbb{M} 46'20	31.25356 AU	max. Earth dist.	-1635 Nov 28 j 09:29	23° \mathbb{M} 16'33	31.19817 AU
retrograde	-1642 Feb 22 j 16:44	8° \mathbb{M} 15'39		retrograde	-1634 Mar 12 j 12:36	25° \mathbb{M} 46'21	
opposition	-1642 May 13 j 13:41	6° \mathbb{M} 52'48	1°46'58	opposition	-1634 May 31 j 21:51	24° \mathbb{M} 23'04	1°19'44
min. Earth dist.	-1642 May 13 j 17:34	6° \mathbb{M} 52'32	29.25004 AU	min. Earth dist.	-1634 May 31 j 17:17	24° \mathbb{M} 23'23	29.19452 AU
direct	-1642 Aug 02 j 01:12	5° \mathbb{M} 29'17		direct	-1634 Aug 19 j 20:03	22° \mathbb{M} 59'59	
conjunction	-1642 Nov 13 j 13:18	7° \mathbb{M} 57'41	1°38'47	conjunction	-1634 Nov 30 j 15:02	25° \mathbb{M} 27'56	1°12'47
minimum elong	-1642 Nov 13 j 13:18	7° \mathbb{M} 57'42	1°38'45	minimum elong	-1634 Nov 30 j 15:03	25° \mathbb{M} 27'56	1°12'46
max. Earth dist.	-1642 Nov 13 j 10:37	7° \mathbb{M} 57'26	31.24479 AU	max. Earth dist.	-1634 Nov 30 j 18:48	25° \mathbb{M} 28'18	31.18953 AU
retrograde	-1641 Feb 25 j 02:23	10° \mathbb{M} 26'41		retrograde	-1633 Mar 15 j 01:17	27° \mathbb{M} 58'16	
opposition	-1641 May 16 j 02:37	9° \mathbb{M} 03'45	1°44'04	opposition	-1633 Jun 03 j 11:13	26° \mathbb{M} 34'55	1°15'45
min. Earth dist.	-1641 May 16 j 04:56	9° \mathbb{M} 03'36	29.24150 AU	min. Earth dist.	-1633 Jun 03 j 06:42	26° \mathbb{M} 35'13	29.18521 AU
direct	-1641 Aug 04 j 14:36	7° \mathbb{M} 40'16		direct	-1633 Aug 22 j 06:34	25° \mathbb{M} 11'51	
conjunction	-1641 Nov 15 j 22:10	10° \mathbb{M} 08'35	1°36'00	conjunction	-1633 Dec 03 j 00:37	27° \mathbb{M} 39'45	1°09'00
minimum elong	-1641 Nov 15 j 22:11	10° \mathbb{M} 08'35	1°35'59	minimum elong	-1633 Dec 03 j 00:38	27° \mathbb{M} 39'45	1°08'59
max. Earth dist.	-1641 Nov 15 j 19:37	10° \mathbb{M} 08'20	31.23677 AU	max. Earth dist.	-1633 Dec 03 j 05:59	27° \mathbb{M} 40'15	31.17954 AU
retrograde	-1640 Feb 27 j 14:18	12° \mathbb{M} 37'43			-1632 Feb 20 j 13:29	0° \mathbb{R}	
opposition	-1640 May 17 j 15:36	11° \mathbb{M} 14'43	1°41'01	retrograde	-1632 Mar 16 j 12:35	0° \mathbb{R} 10'13	
min. Earth dist.	-1640 May 17 j 16:38	11° \mathbb{M} 14'38	29.23397 AU		-1632 Apr 10 j 23:22	30° \mathbb{R} \mathbb{M}	
direct	-1640 Aug 06 j 01:45	9° \mathbb{M} 51'16		opposition	-1632 Jun 05 j 00:29	28° \mathbb{M} 46'47	1°11'39
				min. Earth dist.	-1632 Jun 04 j 18:54	28° \mathbb{M} 47'09	29.17441 AU

Attention, astronomical year style is used: The year -1632 in astronomical counting style is the year 1633 BCE in historical counting style.

direct	-1632 Aug 23 j 20:14	27° \mathbb{M} 23'44		direct	-1624 Sep 10 j 11:31	14° \mathbb{Z} 59'25	
conjunction	-1632 Dec 04 j 10:10	29° \mathbb{M} 51'33	1°05'07	conjunction	-1624 Dec 21 j 15:34	17° \mathbb{Z} 27'01	0°31'05
minimum elong	-1632 Dec 04 j 10:11	29° \mathbb{M} 51'33	1°05'06	minimum elong	-1624 Dec 21 j 15:34	17° \mathbb{Z} 27'01	0°31'03
max. Earth dist.	-1632 Dec 04 j 15:06	29° \mathbb{M} 52'01	31.16826 AU	max. Earth dist.	-1624 Dec 22 j 05:20	17° \mathbb{Z} 28'19	31.08727 AU
	-1632 Dec 08 j 03:14	0° \mathbb{Z}		retrograde	-1623 Apr 06 j 02:47	19° \mathbb{Z} 58'57	
retrograde	-1631 Mar 19 j 01:41	2° \mathbb{Z} 22'09		opposition	-1623 Jun 25 j 22:16	18° \mathbb{Z} 34'54	0°30'45
opposition	-1631 Jun 07 j 13:33	0° \mathbb{Z} 58'37	1°07'26	min. Earth dist.	-1623 Jun 25 j 08:30	18° \mathbb{Z} 35'50	29.08326 AU
min. Earth dist.	-1631 Jun 07 j 07:19	0° \mathbb{Z} 59'02	29.16267 AU	direct	-1623 Sep 13 j 00:39	17° \mathbb{Z} 12'03	
	-1631 Jul 17 j 13:49	30° \mathbb{R} \mathbb{M}					
direct	-1631 Aug 26 j 07:44	29° \mathbb{M} 35'33		conjunction	-1623 Dec 24 j 01:36	19° \mathbb{Z} 39'39	0°26'33
	-1631 Oct 03 j 15:56	0° \mathbb{Z}		minimum elong	-1623 Dec 24 j 01:36	19° \mathbb{Z} 39'39	0°26'31
				max. Earth dist.	-1623 Dec 24 j 14:55	19° \mathbb{Z} 40'55	31.07886 AU
conjunction	-1631 Dec 06 j 19:49	2° \mathbb{Z} 03'19	1°01'08	retrograde	-1622 Apr 08 j 17:41	22° \mathbb{Z} 11'46	
minimum elong	-1631 Dec 06 j 19:49	2° \mathbb{Z} 03'19	1°01'07	opposition	-1622 Jun 28 j 11:28	20° \mathbb{Z} 47'40	0°25'52
max. Earth dist.	-1631 Dec 07 j 02:32	2° \mathbb{Z} 03'57	31.15618 AU	min. Earth dist.	-1622 Jun 27 j 21:10	20° \mathbb{Z} 48'38	29.07456 AU
retrograde	-1630 Mar 21 j 12:00	4° \mathbb{Z} 34'03		direct	-1622 Sep 15 j 12:00	19° \mathbb{Z} 24'50	
opposition	-1630 Jun 10 j 02:44	3° \mathbb{Z} 10'24	1°03'08				
min. Earth dist.	-1630 Jun 09 j 19:59	3° \mathbb{Z} 10'52	29.15037 AU	conjunction	-1622 Dec 26 j 11:49	21° \mathbb{Z} 52'27	0°21'57
direct	-1630 Aug 28 j 20:19	1° \mathbb{Z} 47'20		minimum elong	-1622 Dec 26 j 11:49	21° \mathbb{Z} 52'27	0°21'56
				max. Earth dist.	-1622 Dec 27 j 02:39	21° \mathbb{Z} 53'51	31.06962 AU
conjunction	-1630 Dec 09 j 05:11	4° \mathbb{Z} 15'01	0°57'04	retrograde	-1621 Apr 11 j 04:51	24° \mathbb{Z} 24'44	
minimum elong	-1630 Dec 09 j 05:11	4° \mathbb{Z} 15'01	0°57'02	min. Earth dist.	-1621 Jun 30 j 10:14	23° \mathbb{Z} 01'33	29.06477 AU
max. Earth dist.	-1630 Dec 09 j 12:10	4° \mathbb{Z} 15'41	31.14405 AU	opposition	-1621 Jul 01 j 00:45	23° \mathbb{Z} 00'34	0°20'56
retrograde	-1629 Mar 23 j 23:43	6° \mathbb{Z} 45'54		direct	-1621 Sep 18 j 00:15	21° \mathbb{Z} 37'46	
opposition	-1629 Jun 12 j 15:51	5° \mathbb{Z} 22'10	0°58'45				
min. Earth dist.	-1629 Jun 12 j 07:25	5° \mathbb{Z} 22'44	29.13846 AU	conjunction	-1621 Dec 28 j 22:09	24° \mathbb{Z} 05'21	0°17'21
direct	-1629 Aug 31 j 07:19	3° \mathbb{Z} 59'05		minimum elong	-1621 Dec 28 j 22:09	24° \mathbb{Z} 05'21	0°17'19
				max. Earth dist.	-1621 Dec 29 j 12:45	24° \mathbb{Z} 06'43	31.05937 AU
conjunction	-1629 Dec 11 j 14:47	6° \mathbb{Z} 26'43	0°52'55	retrograde	-1620 Apr 12 j 17:50	26° \mathbb{Z} 37'46	
minimum elong	-1629 Dec 11 j 14:48	6° \mathbb{Z} 26'43	0°52'54	opposition	-1620 Jul 02 j 13:52	25° \mathbb{Z} 13'32	0°15'59
max. Earth dist.	-1629 Dec 11 j 23:22	6° \mathbb{Z} 27'32	31.13241 AU	min. Earth dist.	-1620 Jul 01 j 22:18	25° \mathbb{Z} 14'35	29.05395 AU
retrograde	-1628 Mar 25 j 10:23	8° \mathbb{Z} 57'46		direct	-1620 Sep 19 j 12:02	23° \mathbb{Z} 50'42	
opposition	-1628 Jun 14 j 04:58	7° \mathbb{Z} 33'56	0°54'16				
min. Earth dist.	-1628 Jun 13 j 20:21	7° \mathbb{Z} 34'31	29.12730 AU	conjunction	-1620 Dec 30 j 08:36	26° \mathbb{Z} 18'16	0°12'42
direct	-1628 Sep 01 j 17:52	6° \mathbb{Z} 10'52		minimum elong	-1620 Dec 30 j 08:35	26° \mathbb{Z} 18'16	0°12'41
				behind sun begin	-1620 Dec 30 j 04:27	26° \mathbb{Z} 17'54	
conjunction	-1628 Dec 13 j 00:21	8° \mathbb{Z} 38'28	0°48'42	behind sun end	-1620 Dec 30 j 12:44	26° \mathbb{Z} 18'39	
minimum elong	-1628 Dec 13 j 00:22	8° \mathbb{Z} 38'28	0°48'40	max. Earth dist.	-1620 Dec 31 j 00:03	26° \mathbb{Z} 19'44	31.04792 AU
max. Earth dist.	-1628 Dec 13 j 09:49	8° \mathbb{Z} 39'22	31.12187 AU	retrograde	-1619 Apr 15 j 05:24	28° \mathbb{Z} 50'48	
retrograde	-1627 Mar 27 j 23:00	11° \mathbb{Z} 09'40		min. Earth dist.	-1619 Jul 04 j 11:55	27° \mathbb{Z} 27'30	29.04201 AU
opposition	-1627 Jun 16 j 17:56	9° \mathbb{Z} 45'47	0°49'43	opposition	-1619 Jul 05 j 03:04	27° \mathbb{Z} 26'28	0°11'00
min. Earth dist.	-1627 Jun 16 j 07:08	9° \mathbb{Z} 46'31	29.11718 AU	direct	-1619 Sep 21 j 23:44	26° \mathbb{Z} 03'37	
direct	-1627 Sep 04 j 04:28	8° \mathbb{Z} 22'44					
				conjunction	-1618 Jan 01 j 18:58	28° \mathbb{Z} 31'08	0°08'04
conjunction	-1627 Dec 15 j 09:59	10° \mathbb{Z} 50'20	0°44'23	minimum elong	-1618 Jan 01 j 18:58	28° \mathbb{Z} 31'08	0°08'02
minimum elong	-1627 Dec 15 j 10:00	10° \mathbb{Z} 50'20	0°44'22	behind sun begin	-1618 Jan 01 j 13:13	28° \mathbb{Z} 30'37	
max. Earth dist.	-1627 Dec 15 j 20:13	10° \mathbb{Z} 51'18	31.11218 AU	behind sun end	-1618 Jan 02 j 00:43	28° \mathbb{Z} 31'39	
retrograde	-1626 Mar 30 j 11:19	13° \mathbb{Z} 21'43		max. Earth dist.	-1618 Jan 02 j 10:56	28° \mathbb{Z} 32'38	31.03573 AU
opposition	-1626 Jun 19 j 07:01	11° \mathbb{Z} 57'46	0°45'04		-1618 Feb 12 j 10:32	0° \mathbb{Z}	
min. Earth dist.	-1626 Jun 18 j 20:14	11° \mathbb{Z} 58'30	29.10798 AU	retrograde	-1618 Apr 17 j 17:44	1° \mathbb{Z} 03'47	
direct	-1626 Sep 06 j 14:46	10° \mathbb{Z} 34'47			-1618 Jun 24 j 22:12	30° \mathbb{R} \mathbb{Z}	
				opposition	-1618 Jul 07 j 16:00	29° \mathbb{Z} 39'20	0°06'01
conjunction	-1626 Dec 17 j 19:47	13° \mathbb{Z} 02'21	0°40'01	min. Earth dist.	-1618 Jul 06 j 23:14	29° \mathbb{Z} 40'29	29.02958 AU
minimum elong	-1626 Dec 17 j 19:47	13° \mathbb{Z} 02'21	0°39'59	direct	-1618 Sep 24 j 11:25	28° \mathbb{Z} 16'26	
max. Earth dist.	-1626 Dec 18 j 07:39	13° \mathbb{Z} 03'29	31.10350 AU		-1618 Dec 15 j 15:53	0° \mathbb{Z}	
retrograde	-1625 Apr 02 j 00:38	15° \mathbb{Z} 33'55					
opposition	-1625 Jun 21 j 20:05	14° \mathbb{Z} 09'56	0°40'22	conjunction	-1617 Jan 04 j 05:22	0° \mathbb{Z} 43'55	0°03'24
min. Earth dist.	-1625 Jun 21 j 07:25	14° \mathbb{Z} 10'48	29.09952 AU	minimum elong	-1617 Jan 04 j 05:21	0° \mathbb{Z} 43'55	0°03'22
direct	-1625 Sep 09 j 01:52	12° \mathbb{Z} 46'59		behind sun begin	-1617 Jan 03 j 22:58	0° \mathbb{Z} 43'20	
				behind sun end	-1617 Jan 04 j 11:44	0° \mathbb{Z} 44'30	
conjunction	-1625 Dec 20 j 05:28	15° \mathbb{Z} 14'35	0°35'35	max. Earth dist.	-1617 Jan 04 j 21:43	0° \mathbb{Z} 45'27	31.02326 AU
minimum elong	-1625 Dec 20 j 05:28	15° \mathbb{Z} 14'35	0°35'33	retrograde	-1617 Apr 20 j 05:08	3° \mathbb{Z} 16'41	
max. Earth dist.	-1625 Dec 20 j 17:28	15° \mathbb{Z} 15'43	31.09531 AU	opposition	-1617 Jul 10 j 05:08	1° \mathbb{Z} 52'07	0°01'01
retrograde	-1624 Apr 03 j 13:58	17° \mathbb{Z} 46'21		min. Earth dist.	-1617 Jul 09 j 12:38	1° \mathbb{Z} 53'15	29.01739 AU
opposition	-1624 Jun 23 j 09:19	16° \mathbb{Z} 22'19	0°35'35	desc. node	-1617 Sep 22 j 18:25	0° \mathbb{Z} 29'28	
min. Earth dist.	-1624 Jun 22 j 20:36	16° \mathbb{Z} 23'11	29.09150 AU	direct	-1617 Sep 26 j 21:46	0° \mathbb{Z} 29'11	

Attention, astronomical year style is used: The year -1616 in astronomical counting style is the year 1617 BCE in historical counting style.

conjunction	-1616 Jan 06 j 15:50	2°☾56'37	0°-1'-23	retrograde	-1609 May 08 j 15:45	21°☾02'12	
minimum elong	-1616 Jan 06 j 15:50	2°☾56'37	0°01'26	opposition	-1609 Jul 28 j 11:53	19°☾37'21	0°-38'-33
behind sun begin	-1616 Jan 06 j 09:25	2°☾56'02		min. Earth dist.	-1609 Jul 27 j 13:40	19°☾38'53	28.95230 AU
behind sun end	-1616 Jan 06 j 22:15	2°☾57'12		direct	-1609 Oct 14 j 15:48	18°☾14'31	
max. Earth dist.	-1616 Jan 07 j 09:46	2°☾58'19	31.01142 AU				
retrograde	-1616 Apr 21 j 17:31	5°☾29'29		conjunction	-1608 Jan 24 j 07:15	20°☾42'15	0°-38'-16
opposition	-1616 Jul 11 j 18:01	4°☾04'50	0°-3'-58	minimum elong	-1608 Jan 24 j 07:15	20°☾42'15	0°38'19
min. Earth dist.	-1616 Jul 10 j 23:47	4°☾06'05	29.00595 AU	max. Earth dist.	-1608 Jan 25 j 05:18	20°☾44'20	30.94804 AU
direct	-1616 Sep 28 j 08:59	2°☾41'52		retrograde	-1608 May 10 j 03:43	23°☾16'17	
				min. Earth dist.	-1608 Jul 29 j 03:36	21°☾52'52	28.94434 AU
conjunction	-1615 Jan 08 j 02:22	5°☾09'18	0°-6'-4	opposition	-1608 Jul 30 j 00:53	21°☾51'24	0°-43'-20
minimum elong	-1615 Jan 08 j 02:21	5°☾09'18	0°06'07	direct	-1608 Oct 16 j 02:02	20°☾28'34	
behind sun begin	-1615 Jan 07 j 20:14	5°☾08'45					
behind sun end	-1615 Jan 08 j 08:27	5°☾09'51		conjunction	-1607 Jan 25 j 18:59	22°☾56'20	0°-42'-43
max. Earth dist.	-1615 Jan 08 j 20:13	5°☾10'59	31.00048 AU	minimum elong	-1607 Jan 25 j 18:59	22°☾56'20	0°42'45
retrograde	-1615 Apr 24 j 06:51	7°☾42'17		max. Earth dist.	-1607 Jan 26 j 17:48	22°☾58'30	30.93952 AU
opposition	-1615 Jul 14 j 06:49	6°☾17'34	0°-8'-58	retrograde	-1607 May 12 j 16:34	25°☾30'28	
min. Earth dist.	-1615 Jul 13 j 12:35	6°☾18'49	28.99573 AU	opposition	-1607 Aug 01 j 13:31	24°☾05'33	0°-48'-4
direct	-1615 Sep 30 j 18:38	4°☾54'34		min. Earth dist.	-1607 Jul 31 j 15:16	24°☾07'05	28.93524 AU
				direct	-1607 Oct 18 j 13:04	22°☾42'41	
conjunction	-1614 Jan 10 j 13:03	7°☾22'01	0°-10'-44				
minimum elong	-1614 Jan 10 j 13:03	7°☾22'01	0°10'46	conjunction	-1606 Jan 28 j 06:34	25°☾10'29	0°-47'-6
behind sun begin	-1614 Jan 10 j 08:05	7°☾21'34		minimum elong	-1606 Jan 28 j 06:34	25°☾10'29	0°47'08
behind sun end	-1614 Jan 10 j 18:01	7°☾22'28		max. Earth dist.	-1606 Jan 29 j 04:37	25°☾12'34	30.92995 AU
max. Earth dist.	-1614 Jan 11 j 08:48	7°☾23'53	30.99084 AU	retrograde	-1606 May 15 j 05:56	27°☾44'43	
retrograde	-1614 Apr 26 j 19:47	9°☾55'08		min. Earth dist.	-1606 Aug 03 j 04:48	26°☾21'12	28.92544 AU
opposition	-1614 Jul 16 j 19:40	8°☾30'22	0°-13'-58	opposition	-1606 Aug 04 j 02:24	26°☾19'42	0°-52'-43
min. Earth dist.	-1614 Jul 16 j 00:07	8°☾31'42	28.98670 AU	direct	-1606 Oct 20 j 23:05	24°☾56'48	
direct	-1614 Oct 03 j 07:11	7°☾07'23					
conjunction	-1613 Jan 12 j 23:32	9°☾34'51	0°-15'-23	conjunction	-1605 Jan 30 j 18:13	27°☾24'37	0°-51'-25
minimum elong	-1613 Jan 12 j 23:32	9°☾34'51	0°15'25	minimum elong	-1605 Jan 30 j 18:13	27°☾24'37	0°51'27
behind sun begin	-1613 Jan 12 j 21:33	9°☾34'40		max. Earth dist.	-1605 Jan 31 j 17:38	27°☾26'50	30.91993 AU
behind sun end	-1613 Jan 13 j 01:32	9°☾35'01		retrograde	-1605 May 17 j 18:40	29°☾58'55	
max. Earth dist.	-1613 Jan 13 j 19:05	9°☾36'41	30.98249 AU	opposition	-1605 Aug 06 j 15:04	28°☾33'50	0°-57'-17
retrograde	-1613 Apr 29 j 10:48	12°☾08'07		min. Earth dist.	-1605 Aug 05 j 16:45	28°☾35'22	28.91538 AU
opposition	-1613 Jul 19 j 08:35	10°☾43'18	0°-18'-57	direct	-1605 Oct 23 j 11:47	27°☾10'52	
min. Earth dist.	-1613 Jul 18 j 12:20	10°☾44'41	28.97899 AU				
direct	-1613 Oct 05 j 17:46	9°☾20'20		conjunction	-1604 Feb 02 j 05:55	29°☾38'42	0°-55'-39
conjunction	-1612 Jan 15 j 10:27	11°☾47'51	0°-20'-1	minimum elong	-1604 Feb 02 j 05:55	29°☾38'42	0°55'41
minimum elong	-1612 Jan 15 j 10:27	11°☾47'51	0°20'03	max. Earth dist.	-1604 Feb 03 j 04:36	29°☾40'51	30.91002 AU
max. Earth dist.	-1612 Jan 16 j 07:41	11°☾49'52	30.97518 AU		-1604 Feb 11 j 15:25	0°≈	
retrograde	-1612 Apr 30 j 22:50	14°☾21'16		retrograde	-1604 May 19 j 09:12	2°≈13'04	
opposition	-1612 Jul 20 j 21:21	12°☾56'27	0°-23'-54	min. Earth dist.	-1604 Aug 07 j 05:07	0°≈49'28	28.90588 AU
min. Earth dist.	-1612 Jul 20 j 00:47	12°☾57'51	28.97208 AU	opposition	-1604 Aug 08 j 03:34	0°≈47'54	-1°-1'-46
direct	-1612 Oct 07 j 05:23	11°☾33'31			-1604 Sep 07 j 19:32	30°☾	
				direct	-1604 Oct 24 j 22:11	29°☾24'52	
conjunction	-1611 Jan 16 j 21:24	14°☾01'05	0°-24'-38		-1604 Dec 09 j 12:18	0°≈	
minimum elong	-1611 Jan 16 j 21:24	14°☾01'05	0°24'41	conjunction	-1603 Feb 03 j 17:49	1°≈52'45	0°-59'-48
max. Earth dist.	-1611 Jan 17 j 18:34	14°☾03'05	30.96864 AU	minimum elong	-1603 Feb 03 j 17:49	1°≈52'45	0°59'50
retrograde	-1611 May 03 j 13:26	16°☾34'40		max. Earth dist.	-1603 Feb 04 j 17:52	1°≈55'01	30.90076 AU
opposition	-1611 Jul 23 j 10:09	15°☾09'50	0°-28'-50	retrograde	-1603 May 21 j 21:28	4°≈27'10	
min. Earth dist.	-1611 Jul 22 j 12:35	15°☾11'19	28.96574 AU	opposition	-1603 Aug 10 j 16:05	3°≈01'57	-1°-6'-10
direct	-1611 Oct 09 j 16:54	13°☾46'56		min. Earth dist.	-1603 Aug 09 j 17:26	3°≈03'31	28.89716 AU
				direct	-1603 Oct 27 j 09:56	1°≈38'53	
conjunction	-1610 Jan 19 j 08:28	16°☾14'34	0°-29'-13				
minimum elong	-1610 Jan 19 j 08:27	16°☾14'34	0°29'16	conjunction	-1602 Feb 06 j 05:33	4°≈06'47	-1°-3'-51
max. Earth dist.	-1610 Jan 20 j 06:30	16°☾16'39	30.96218 AU	minimum elong	-1602 Feb 06 j 05:32	4°≈06'47	1°03'54
retrograde	-1610 May 06 j 02:18	18°☾48'19		max. Earth dist.	-1602 Feb 07 j 05:23	4°≈09'03	30.89266 AU
opposition	-1610 Jul 25 j 23:03	17°☾23'28	0°-33'-43	retrograde	-1602 May 24 j 12:54	6°≈41'17	
min. Earth dist.	-1610 Jul 25 j 02:03	17°☾24'55	28.95925 AU	min. Earth dist.	-1602 Aug 12 j 04:58	5°≈17'39	28.88976 AU
direct	-1610 Oct 12 j 04:17	16°☾00'37		opposition	-1602 Aug 13 j 04:33	5°≈16'01	-1°-10'-27
				direct	-1602 Oct 29 j 22:22	3°≈52'55	
conjunction	-1609 Jan 21 j 19:49	18°☾28'18	0°-33'-46				
minimum elong	-1609 Jan 21 j 19:49	18°☾28'18	0°33'49	conjunction	-1601 Feb 08 j 17:32	6°≈20'52	-1°-7'-50
max. Earth dist.	-1609 Jan 22 j 18:06	18°☾30'25	30.95555 AU	minimum elong	-1601 Feb 08 j 17:32	6°≈20'52	1°07'52
				max. Earth dist.	-1601 Feb 09 j 18:16	6°≈23'13	30.88577 AU

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Attention, astronomical year style is used: The year -1601 in astronomical counting style is the year 1602 BCE in historical counting style.

retrograde	-1601 May 27 j 01:53	8° \approx 55'27		retrograde	-1593 Jun 14 j 13:55	26° \approx 53'11	
opposition	-1601 Aug 15 j 17:02	7° \approx 30'08	-1°-14'-39	opposition	-1593 Sep 02 j 19:30	25° \approx 27'47	-1°-43'-41
min. Earth dist.	-1601 Aug 14 j 17:55	7° \approx 31'45	28.88361 AU	min. Earth dist.	-1593 Sep 01 j 20:53	25° \approx 29'22	28.84273 AU
direct	-1601 Nov 01 j 10:10	6° \approx 07'02		direct	-1593 Nov 19 j 04:33	24° \approx 04'28	
conjunction	-1600 Feb 11 j 05:39	8° \approx 35'02	-1°-11'-42	conjunction	-1592 Feb 29 j 11:25	26° \approx 33'03	-1°-38'-20
minimum elong	-1600 Feb 11 j 05:39	8° \approx 35'02	1°11'44	minimum elong	-1592 Feb 29 j 11:25	26° \approx 33'03	1°38'23
max. Earth dist.	-1600 Feb 12 j 06:40	8° \approx 37'24	30.88028 AU	max. Earth dist.	-1592 Mar 01 j 11:28	26° \approx 35'19	30.83798 AU
retrograde	-1600 May 28 j 15:46	11° \approx 09'41		retrograde	-1592 Jun 16 j 02:27	29° \approx 08'05	
min. Earth dist.	-1600 Aug 16 j 05:03	9° \approx 46'04	28.87866 AU	min. Earth dist.	-1592 Sep 03 j 10:00	27° \approx 44'09	28.83564 AU
opposition	-1600 Aug 17 j 05:24	9° \approx 44'22	-1°-18'-44	opposition	-1592 Sep 04 j 07:36	27° \approx 42'38	-1°-46'-39
direct	-1600 Nov 02 j 22:03	8° \approx 21'15		direct	-1592 Nov 20 j 16:44	26° \approx 19'16	
conjunction	-1599 Feb 12 j 17:51	10° \approx 49'20	-1°-15'-28	conjunction	-1591 Mar 03 j 00:30	28° \approx 47'54	-1°-41'-3
minimum elong	-1599 Feb 12 j 17:51	10° \approx 49'20	1°15'30	minimum elong	-1591 Mar 03 j 00:30	28° \approx 47'54	1°41'04
max. Earth dist.	-1599 Feb 13 j 18:45	10° \approx 51'41	30.87565 AU	max. Earth dist.	-1591 Mar 04 j 00:19	28° \approx 50'08	30.83118 AU
retrograde	-1599 May 31 j 04:22	13° \approx 24'04			-1591 Apr 05 j 03:49	0° \approx	
opposition	-1599 Aug 19 j 17:46	11° \approx 58'45	-1°-22'-42	retrograde	-1591 Jun 18 j 16:46	1° \approx 22'55	
min. Earth dist.	-1599 Aug 18 j 18:19	12° \approx 00'23	28.87451 AU		-1591 Sep 05 j 06:44	30° \approx	
direct	-1599 Nov 05 j 08:29	10° \approx 35'39		opposition	-1591 Sep 06 j 19:25	29° \approx 57'26	-1°-49'-28
conjunction	-1598 Feb 15 j 06:17	13° \approx 03'48	-1°-19'-7	min. Earth dist.	-1591 Sep 05 j 20:58	29° \approx 59'00	28.82927 AU
minimum elong	-1598 Feb 15 j 06:17	13° \approx 03'48	1°19'09	direct	-1591 Nov 23 j 05:10	28° \approx 33'59	
max. Earth dist.	-1598 Feb 16 j 08:02	13° \approx 06'14	30.87179 AU		-1590 Feb 05 j 00:04	0° \approx	
	-1598 Apr 14 j 05:24	15° \approx		conjunction	-1590 Mar 05 j 13:34	1° \approx 02'41	-1°-43'-36
retrograde	-1598 Jun 02 j 18:10	15° \approx 38'37		minimum elong	-1590 Mar 05 j 13:33	1° \approx 02'41	1°43'38
	-1598 Jul 23 j 15:35	15° \approx		max. Earth dist.	-1590 Mar 06 j 13:04	1° \approx 04'54	30.82521 AU
min. Earth dist.	-1598 Aug 21 j 05:41	14° \approx 15'01	28.87077 AU	retrograde	-1590 Jun 21 j 05:56	3° \approx 37'43	
opposition	-1598 Aug 22 j 06:05	14° \approx 13'19	-1°-26'-32	min. Earth dist.	-1590 Sep 08 j 09:55	2° \approx 13'42	28.82406 AU
direct	-1598 Nov 07 j 19:57	12° \approx 50'13		opposition	-1590 Sep 09 j 07:23	2° \approx 12'12	-1°-52'-7
	-1597 Feb 09 j 15:02	15° \approx		direct	-1590 Nov 25 j 16:19	0° \approx 48'43	
conjunction	-1597 Feb 17 j 18:40	15° \approx 18'27	-1°-22'-39	conjunction	-1589 Mar 08 j 02:44	3° \approx 17'29	-1°-46'00
minimum elong	-1597 Feb 17 j 18:40	15° \approx 18'27	1°22'40	minimum elong	-1589 Mar 08 j 02:44	3° \approx 17'29	1°46'01
max. Earth dist.	-1597 Feb 18 j 19:32	15° \approx 20'48	30.86796 AU	max. Earth dist.	-1589 Mar 09 j 02:53	3° \approx 19'46	30.82069 AU
retrograde	-1597 Jun 05 j 07:03	17° \approx 53'21		retrograde	-1589 Jun 23 j 19:54	5° \approx 52'31	
opposition	-1597 Aug 24 j 18:34	16° \approx 28'03	-1°-30'-15	opposition	-1589 Sep 11 j 19:08	4° \approx 26'59	-1°-54'-35
min. Earth dist.	-1597 Aug 23 j 19:13	16° \approx 29'41	28.86689 AU	min. Earth dist.	-1589 Sep 10 j 20:44	4° \approx 28'34	28.82022 AU
direct	-1597 Nov 10 j 05:53	15° \approx 04'57		direct	-1589 Nov 28 j 04:26	3° \approx 03'28	
conjunction	-1596 Feb 20 j 07:34	17° \approx 33'16	-1°-26'-3	conjunction	-1588 Mar 09 j 15:58	5° \approx 32'19	-1°-48'-14
minimum elong	-1596 Feb 20 j 07:34	17° \approx 33'16	1°26'05	minimum elong	-1588 Mar 09 j 15:58	5° \approx 32'19	1°48'15
max. Earth dist.	-1596 Feb 21 j 09:14	17° \approx 35'41	30.86369 AU	max. Earth dist.	-1588 Mar 10 j 15:12	5° \approx 34'31	30.81753 AU
retrograde	-1596 Jun 06 j 19:30	20° \approx 08'13		retrograde	-1588 Jun 25 j 07:48	8° \approx 07'21	
min. Earth dist.	-1596 Aug 25 j 07:16	18° \approx 44'34	28.86220 AU	min. Earth dist.	-1588 Sep 12 j 09:26	6° \approx 43'21	28.81790 AU
opposition	-1596 Aug 26 j 06:45	18° \approx 42'56	-1°-33'-49	opposition	-1588 Sep 13 j 06:51	6° \approx 41'50	-1°-56'-53
direct	-1596 Nov 11 j 17:49	17° \approx 19'48		direct	-1588 Nov 29 j 14:29	5° \approx 18'18	
conjunction	-1595 Feb 21 j 20:25	19° \approx 48'12	-1°-29'-20	conjunction	-1587 Mar 12 j 05:25	7° \approx 47'15	-1°-50'-18
minimum elong	-1595 Feb 21 j 20:25	19° \approx 48'12	1°29'21	minimum elong	-1587 Mar 12 j 05:25	7° \approx 47'15	1°50'19
max. Earth dist.	-1595 Feb 22 j 20:33	19° \approx 50'29	30.85848 AU	max. Earth dist.	-1587 Mar 13 j 05:38	7° \approx 49'32	30.81586 AU
retrograde	-1595 Jun 09 j 09:59	22° \approx 23'13		retrograde	-1587 Jun 27 j 19:53	10° \approx 22'17	
opposition	-1595 Aug 28 j 19:07	20° \approx 57'54	-1°-37'-15	opposition	-1587 Sep 15 j 18:32	8° \approx 56'48	-1°-59'00
min. Earth dist.	-1595 Aug 27 j 20:11	20° \approx 59'30	28.85654 AU	min. Earth dist.	-1587 Sep 14 j 20:44	8° \approx 58'21	28.81684 AU
direct	-1595 Nov 14 j 03:58	19° \approx 34'43		direct	-1587 Dec 02 j 01:59	7° \approx 33'15	
conjunction	-1594 Feb 24 j 09:20	22° \approx 03'11	-1°-32'-29	conjunction	-1586 Mar 14 j 18:38	10° \approx 02'18	-1°-52'-12
minimum elong	-1594 Feb 24 j 09:20	22° \approx 03'11	1°32'31	minimum elong	-1586 Mar 14 j 18:38	10° \approx 02'18	1°52'14
max. Earth dist.	-1594 Feb 25 j 10:06	22° \approx 05'31	30.85219 AU	max. Earth dist.	-1586 Mar 15 j 17:36	10° \approx 04'28	30.81540 AU
retrograde	-1594 Jun 11 j 22:31	24° \approx 38'13		retrograde	-1586 Jun 30 j 09:59	12° \approx 37'22	
min. Earth dist.	-1594 Aug 30 j 08:56	23° \approx 14'26	28.84981 AU	min. Earth dist.	-1586 Sep 17 j 08:59	11° \approx 13'25	28.81690 AU
opposition	-1594 Aug 31 j 07:25	23° \approx 12'52	-1°-40'-33	opposition	-1586 Sep 18 j 06:19	11° \approx 11'55	-2°00'-57
direct	-1594 Nov 16 j 16:04	21° \approx 49'38		direct	-1586 Dec 04 j 11:16	9° \approx 48'21	
conjunction	-1593 Feb 26 j 22:19	24° \approx 18'09	-1°-35'-29	conjunction	-1585 Mar 17 j 08:21	12° \approx 17'31	-1°-53'-55
minimum elong	-1593 Feb 26 j 22:19	24° \approx 18'09	1°35'31	minimum elong	-1585 Mar 17 j 08:21	12° \approx 17'31	1°53'57
max. Earth dist.	-1593 Feb 27 j 22:04	24° \approx 20'23	30.84524 AU	max. Earth dist.	-1585 Mar 18 j 07:59	12° \approx 19'45	30.81568 AU

Attention, astronomical year style is used: The year -1585 in astronomical counting style is the year 1586 BCE in historical counting style.

retrograde	-1585 Jul 02 j 21:57	14° ✕ 52'35		retrograde	-1577 Jul 21 j 08:38	2° ° 54'08	
opposition	-1585 Sep 20 j 17:55	13° ✕ 27'11	-2°-2'-42	opposition	-1577 Oct 08 j 13:13	1° ° 28'46	-2°-9'-50
min. Earth dist.	-1585 Sep 19 j 21:13	13° ✕ 28'39	28.81734 AU	min. Earth dist.	-1577 Oct 07 j 21:13	1° ° 29'54	28.81143 AU
direct	-1585 Dec 06 j 22:53	12° ✕ 03'37		direct	-1577 Dec 24 j 22:13	0° ° 04'42	
conjunction	-1584 Mar 18 j 22:09	14° ✕ 32'54	-1°-55'-29	conjunction	-1576 Apr 06 j 14:15	2° ° 34'30	-2°-1'-26
minimum elong	-1584 Mar 18 j 22:08	14° ✕ 32'54	1°55'31	minimum elong	-1576 Apr 06 j 14:15	2° ° 34'30	2°01'27
max. Earth dist.	-1584 Mar 19 j 20:20	14° ✕ 34'59	30.81618 AU	max. Earth dist.	-1576 Apr 07 j 08:22	2° ° 36'12	30.81084 AU
retrograde	-1584 Jul 04 j 12:45	17° ✕ 07'56		retrograde	-1576 Jul 22 j 19:31	5° ° 08'52	
min. Earth dist.	-1584 Sep 21 j 09:05	15° ✕ 44'02	28.81772 AU	min. Earth dist.	-1576 Oct 09 j 08:48	3° ° 44'38	28.81365 AU
opposition	-1584 Sep 22 j 05:34	15° ✕ 42'35	-2°-4'-16	opposition	-1576 Oct 10 j 00:19	3° ° 43'32	-2°-9'-50
direct	-1584 Dec 08 j 10:53	14° ✕ 18'59		direct	-1576 Dec 26 j 10:05	2° ° 19'26	
conjunction	-1583 Mar 21 j 12:03	16° ✕ 48'22	-1°-56'-51	conjunction	-1575 Apr 09 j 04:13	4° ° 49'19	-2°-1'-21
minimum elong	-1583 Mar 21 j 12:03	16° ✕ 48'22	1°56'52	minimum elong	-1575 Apr 09 j 04:13	4° ° 49'19	2°01'21
max. Earth dist.	-1583 Mar 22 j 10:07	16° ✕ 50'27	30.81609 AU	max. Earth dist.	-1575 Apr 09 j 20:57	4° ° 50'53	30.81393 AU
retrograde	-1583 Jul 07 j 00:58	19° ✕ 23'23		retrograde	-1575 Jul 25 j 08:58	7° ° 23'37	
opposition	-1583 Sep 24 j 17:15	17° ✕ 58'03	-2°-5'-38	opposition	-1575 Oct 12 j 11:21	5° ° 58'20	-2°-9'-39
min. Earth dist.	-1583 Sep 23 j 22:13	17° ✕ 59'24	28.81730 AU	min. Earth dist.	-1575 Oct 11 j 19:46	5° ° 59'27	28.81752 AU
direct	-1583 Dec 10 j 22:26	16° ✕ 34'24		direct	-1575 Dec 28 j 21:15	4° ° 34'13	
conjunction	-1582 Mar 24 j 02:02	19° ✕ 03'52	-1°-58'-3	conjunction	-1574 Apr 11 j 18:26	7° ° 04'13	-2°-1'-5
minimum elong	-1582 Mar 24 j 02:02	19° ✕ 03'52	1°58'05	minimum elong	-1574 Apr 11 j 18:26	7° ° 04'13	2°01'07
max. Earth dist.	-1582 Mar 24 j 23:03	19° ✕ 05'51	30.81538 AU	max. Earth dist.	-1574 Apr 12 j 11:26	7° ° 05'48	30.81846 AU
retrograde	-1582 Jul 09 j 15:58	21° ✕ 38'49		retrograde	-1574 Jul 27 j 20:42	9° ° 38'26	
min. Earth dist.	-1582 Sep 26 j 09:33	20° ✕ 14'51	28.81619 AU	opposition	-1574 Oct 14 j 22:24	8° ° 13'14	-2°-9'-15
opposition	-1582 Sep 27 j 04:47	20° ✕ 13'29	-2°-6'-49	min. Earth dist.	-1574 Oct 14 j 08:06	8° ° 14'15	28.82267 AU
direct	-1582 Dec 13 j 11:21	18° ✕ 49'47		direct	-1574 Dec 31 j 07:58	6° ° 49'07	
conjunction	-1581 Mar 26 j 15:58	21° ✕ 19'18	-1°-59'-4	conjunction	-1573 Apr 14 j 08:41	9° ° 19'14	-2°00'-37
minimum elong	-1581 Mar 26 j 15:58	21° ✕ 19'18	1°59'05	minimum elong	-1573 Apr 14 j 08:41	9° ° 19'14	2°00'38
max. Earth dist.	-1581 Mar 27 j 12:03	21° ✕ 21'11	30.81386 AU	max. Earth dist.	-1573 Apr 15 j 00:41	9° ° 20'44	30.82425 AU
retrograde	-1581 Jul 12 j 05:21	23° ✕ 54'11		retrograde	-1573 Jul 30 j 11:14	11° ° 53'23	
opposition	-1581 Sep 29 j 16:23	22° ✕ 28'50	-2°-7'-49	opposition	-1573 Oct 17 j 09:20	10° ° 28'17	-2°-8'-40
min. Earth dist.	-1581 Sep 28 j 22:48	22° ✕ 30'04	28.81444 AU	min. Earth dist.	-1573 Oct 16 j 18:51	10° ° 29'19	28.82872 AU
direct	-1581 Dec 15 j 23:37	21° ✕ 05'03		direct	-1572 Jan 02 j 20:33	9° ° 04'10	
conjunction	-1580 Mar 28 j 06:06	23° ✕ 34'37	-1°-59'-55	conjunction	-1572 Apr 15 j 23:06	11° ° 34'25	-1°-59'-59
minimum elong	-1580 Mar 28 j 06:06	23° ✕ 34'37	1°59'56	minimum elong	-1572 Apr 15 j 23:06	11° ° 34'25	2°00'00
max. Earth dist.	-1580 Mar 29 j 01:57	23° ✕ 36'29	30.81203 AU	max. Earth dist.	-1572 Apr 16 j 14:13	11° ° 35'49	30.83041 AU
retrograde	-1580 Jul 13 j 18:57	26° ✕ 09'23		retrograde	-1572 Aug 01 j 00:19	14° ° 08'30	
min. Earth dist.	-1580 Sep 30 j 09:42	24° ✕ 45'17	28.81253 AU	opposition	-1572 Oct 18 j 20:20	12° ° 43'29	-2°-7'-52
opposition	-1580 Oct 01 j 03:35	24° ✕ 44'01	-2°-8'-37	min. Earth dist.	-1572 Oct 18 j 07:41	12° ° 44'23	28.83493 AU
direct	-1580 Dec 17 j 13:05	23° ✕ 20'09		direct	-1571 Jan 04 j 08:28	11° ° 19'22	
conjunction	-1579 Mar 30 j 20:04	25° ✕ 49'47	-2°00'-34	conjunction	-1571 Apr 18 j 13:39	13° ° 49'44	-1°-59'-9
minimum elong	-1579 Mar 30 j 20:04	25° ✕ 49'47	2°00'34	minimum elong	-1571 Apr 18 j 13:39	13° ° 49'44	1°59'09
max. Earth dist.	-1579 Mar 31 j 14:34	25° ✕ 51'31	30.81025 AU	max. Earth dist.	-1571 Apr 19 j 04:04	13° ° 51'05	30.83656 AU
retrograde	-1579 Jul 16 j 07:14	28° ✕ 24'27		retrograde	-1571 Aug 03 j 14:15	16° ° 23'44	
opposition	-1579 Oct 03 j 14:57	26° ✕ 59'03	-2°-9'-13	opposition	-1571 Oct 21 j 07:17	14° ° 58'48	-2°-6'-53
min. Earth dist.	-1579 Oct 02 j 22:24	27° ✕ 00'14	28.81113 AU	min. Earth dist.	-1571 Oct 20 j 18:36	14° ° 59'42	28.84072 AU
direct	-1579 Dec 19 j 23:46	25° ✕ 35'07		direct	-1570 Jan 06 j 21:57	13° ° 34'41	
conjunction	-1578 Apr 02 j 10:01	28° ✕ 04'47	-2°-1'-3	conjunction	-1570 Apr 21 j 04:01	16° ° 05'09	-1°-58'-8
minimum elong	-1578 Apr 02 j 10:01	28° ✕ 04'47	2°01'04	minimum elong	-1570 Apr 21 j 04:01	16° ° 05'09	1°58'09
max. Earth dist.	-1578 Apr 03 j 05:09	28° ✕ 06'35	30.80924 AU	max. Earth dist.	-1570 Apr 21 j 16:40	16° ° 06'19	30.84196 AU
retrograde	-1578 May 30 j 02:00	0° °		retrograde	-1570 Aug 06 j 03:21	18° ° 39'03	
retrograde	-1578 Jul 18 j 19:39	0° ° 39'21		opposition	-1570 Oct 23 j 18:25	17° ° 14'10	-2°-5'-42
min. Earth dist.	-1578 Sep 07 j 11:29	30° °		min. Earth dist.	-1570 Oct 23 j 07:33	17° ° 14'57	28.84572 AU
opposition	-1578 Oct 05 j 09:29	29° ✕ 15'08	28.81057 AU	direct	-1569 Jan 09 j 08:56	15° ° 50'01	
opposition	-1578 Oct 06 j 02:07	29° ✕ 13'57	-2°-9'-37				
direct	-1578 Dec 22 j 12:16	27° ✕ 49'57		conjunction	-1569 Apr 23 j 18:45	18° ° 20'33	-1°-56'-57
	-1577 Mar 27 j 05:28	0° °		minimum elong	-1569 Apr 23 j 18:45	18° ° 20'33	1°56'57
conjunction	-1577 Apr 05 j 00:01	0° ° 19'41	-2°-1'-20	max. Earth dist.	-1569 Apr 24 j 07:11	18° ° 21'43	30.84655 AU
minimum elong	-1577 Apr 05 j 00:01	0° ° 19'41	2°01'20	retrograde	-1569 Aug 08 j 16:52	20° ° 54'19	
max. Earth dist.	-1577 Apr 05 j 17:34	0° ° 21'19	30.80933 AU	opposition	-1569 Oct 26 j 05:13	19° ° 29'30	-2°-4'-20
				min. Earth dist.	-1569 Oct 25 j 18:52	19° ° 30'14	28.84977 AU

Attention, astronomical year style is used: The year -1568 in astronomical counting style is the year 1569 BCE in historical counting style.

direct	-1568 Jan 11 j 22:11	18° Υ 05'17		direct	-1560 Jan 29 j 20:17	6° C 02'27	
conjunction	-1568 Apr 25 j 09:18	20° Υ 35'53	-1°-55'-35	conjunction	-1560 May 14 j 04:30	8° C 33'31	-1°-38'-37
minimum elong	-1568 Apr 25 j 09:18	20° Υ 35'54	1°55'36	minimum elong	-1560 May 14 j 04:30	8° C 33'31	1°38'38
max. Earth dist.	-1568 Apr 25 j 19:29	20° Υ 36'50	30.85035 AU	max. Earth dist.	-1560 May 14 j 09:07	8° C 33'57	30.89939 AU
retrograde	-1568 Aug 10 j 05:16	23° Υ 09'30		retrograde	-1560 Aug 28 j 05:00	11° C 05'50	
opposition	-1568 Oct 27 j 16:07	21° Υ 44'42	-2°-2'-47	opposition	-1560 Nov 14 j 04:35	9° C 41'30	-1°-43'-56
min. Earth dist.	-1568 Oct 27 j 06:57	21° Υ 45'22	28.85335 AU	min. Earth dist.	-1560 Nov 14 j 01:04	9° C 41'45	28.90508 AU
direct	-1567 Jan 13 j 08:58	20° Υ 20'26		direct	-1559 Jan 31 j 09:59	8° C 16'53	
conjunction	-1567 Apr 27 j 23:47	22° Υ 51'05	-1°-54'-3	conjunction	-1559 May 16 j 18:43	10° C 48'02	-1°-35'-47
minimum elong	-1567 Apr 27 j 23:47	22° Υ 51'05	1°54'03	minimum elong	-1559 May 16 j 18:44	10° C 48'02	1°35'46
max. Earth dist.	-1567 Apr 28 j 10:05	22° Υ 52'02	30.85377 AU	max. Earth dist.	-1559 May 16 j 21:16	10° C 48'17	30.90909 AU
retrograde	-1567 Aug 12 j 15:34	25° Υ 24'31		retrograde	-1559 Aug 30 j 17:24	13° C 20'14	
opposition	-1567 Oct 30 j 02:53	23° Υ 59'46	-2°-1'-3	opposition	-1559 Nov 16 j 15:08	11° C 55'59	-1°-40'-49
min. Earth dist.	-1567 Oct 29 j 18:38	24° Υ 00'21	28.85668 AU	min. Earth dist.	-1559 Nov 16 j 12:48	11° C 56'09	28.91463 AU
direct	-1566 Jan 15 j 21:32	22° Υ 35'25		direct	-1558 Feb 02 j 21:08	10° C 31'21	
conjunction	-1566 Apr 30 j 14:09	25° Υ 06'06	-1°-52'-20	conjunction	-1558 May 19 j 09:19	13° C 02'35	-1°-32'-48
minimum elong	-1566 Apr 30 j 14:10	25° Υ 06'06	1°52'21	minimum elong	-1558 May 19 j 09:19	13° C 02'35	1°32'48
max. Earth dist.	-1566 Apr 30 j 22:31	25° Υ 06'53	30.85737 AU	max. Earth dist.	-1558 May 19 j 11:42	13° C 02'49	30.91827 AU
retrograde	-1566 Aug 15 j 04:08	27° Υ 39'22			-1558 Jul 18 j 03:47	15° C	
opposition	-1566 Nov 01 j 13:27	26° Υ 14'38	-1°-59'-8	retrograde	-1558 Sep 02 j 04:30	15° C 34'37	
min. Earth dist.	-1566 Nov 01 j 05:32	26° Υ 15'12	28.86052 AU		-1558 Oct 18 j 23:00	15° R C	
direct	-1565 Jan 18 j 08:32	24° Υ 50'12		opposition	-1558 Nov 19 j 01:35	14° C 10'29	-1°-37'-34
conjunction	-1565 May 03 j 04:39	27° Υ 20'56	-1°-50'-28	min. Earth dist.	-1558 Nov 19 j 00:31	14° C 10'33	28.92328 AU
minimum elong	-1565 May 03 j 04:40	27° Υ 20'56	1°50'27	direct	-1557 Feb 05 j 09:41	12° C 45'49	
max. Earth dist.	-1565 May 03 j 13:03	27° Υ 21'43	30.86150 AU		-1557 May 14 j 07:28	15° C	
retrograde	-1565 Aug 17 j 14:42	29° Υ 54'02		conjunction	-1557 May 21 j 23:46	15° C 17'07	-1°-29'-41
opposition	-1565 Nov 04 j 00:09	28° Υ 29'20	-1°-57'-2	minimum elong	-1557 May 21 j 23:47	15° C 17'07	1°29'40
min. Earth dist.	-1565 Nov 03 j 17:41	28° Υ 29'48	28.86503 AU	max. Earth dist.	-1557 May 21 j 23:39	15° C 17'06	30.92654 AU
direct	-1564 Jan 20 j 19:07	27° Υ 04'50		retrograde	-1557 Sep 04 j 17:22	17° C 48'58	
conjunction	-1564 May 04 j 19:00	29° Υ 35'36	-1°-48'-25	opposition	-1557 Nov 21 j 12:03	16° C 24'54	-1°-34'-9
minimum elong	-1564 May 04 j 19:00	29° Υ 35'36	1°48'25	min. Earth dist.	-1557 Nov 21 j 11:37	16° C 24'56	28.93100 AU
max. Earth dist.	-1564 May 05 j 02:08	29° Υ 36'16	30.86663 AU	direct	-1556 Feb 07 j 20:55	15° C 00'11	
	-1564 May 15 j 17:41	0° C		conjunction	-1556 May 23 j 14:15	17° C 31'33	-1°-26'-26
retrograde	-1564 Aug 19 j 02:54	2° C 08'32		minimum elong	-1556 May 23 j 14:16	17° C 31'33	1°26'26
opposition	-1564 Nov 05 j 10:34	0° C 43'52	-1°-54'-45	max. Earth dist.	-1556 May 23 j 13:47	17° C 31'30	30.93372 AU
min. Earth dist.	-1564 Nov 05 j 03:50	0° C 44'21	28.87071 AU	retrograde	-1556 Sep 06 j 03:18	20° C 03'13	
	-1564 Dec 02 j 10:48	30° R Υ		opposition	-1556 Nov 22 j 22:32	18° C 39'13	-1°-30'-37
direct	-1563 Jan 22 j 08:11	29° Υ 19'18		min. Earth dist.	-1556 Nov 22 j 23:57	18° C 39'07	28.93769 AU
	-1563 Mar 13 j 08:16	0° C		direct	-1555 Feb 09 j 07:47	17° C 14'27	
conjunction	-1563 May 07 j 09:19	1° C 50'09	-1°-46'-12	conjunction	-1555 May 26 j 04:31	19° C 45'50	-1°-23'-3
minimum elong	-1563 May 07 j 09:19	1° C 50'09	1°46'12	minimum elong	-1555 May 26 j 04:32	19° C 45'50	1°23'03
max. Earth dist.	-1563 May 07 j 15:54	1° C 50'46	30.87295 AU	max. Earth dist.	-1555 May 26 j 02:16	19° C 45'37	30.94026 AU
retrograde	-1563 Aug 21 j 14:08	4° C 22'55		retrograde	-1555 Sep 08 j 14:49	22° C 17'19	
opposition	-1563 Nov 07 j 21:12	2° C 58'18	-1°-52'-18	opposition	-1555 Nov 25 j 08:47	20° C 53'22	-1°-26'-56
min. Earth dist.	-1563 Nov 07 j 15:57	2° C 58'41	28.87774 AU	min. Earth dist.	-1555 Nov 25 j 10:17	20° C 53'15	28.94394 AU
direct	-1562 Jan 24 j 19:54	1° C 33'42		direct	-1554 Feb 11 j 20:48	19° C 28'32	
conjunction	-1562 May 09 j 23:35	4° C 04'36	-1°-43'-50	conjunction	-1554 May 28 j 18:42	21° C 59'57	-1°-19'-34
minimum elong	-1562 May 09 j 23:35	4° C 04'36	1°43'50	minimum elong	-1554 May 28 j 18:43	21° C 59'57	1°19'33
max. Earth dist.	-1562 May 10 j 05:39	4° C 05'10	30.88079 AU	max. Earth dist.	-1554 May 28 j 15:42	21° C 59'40	30.94638 AU
retrograde	-1562 Aug 24 j 03:07	6° C 37'13		retrograde	-1554 Sep 11 j 01:01	24° C 31'15	
opposition	-1562 Nov 10 j 07:39	5° C 12'41	-1°-49'-41	opposition	-1554 Nov 27 j 19:10	23° C 07'19	-1°-23'-9
min. Earth dist.	-1562 Nov 10 j 02:05	5° C 13'05	28.88606 AU	min. Earth dist.	-1554 Nov 27 j 22:31	23° C 07'05	28.95003 AU
direct	-1561 Jan 27 j 09:13	3° C 48'04		direct	-1553 Feb 14 j 08:20	21° C 42'25	
conjunction	-1561 May 12 j 13:57	6° C 19'03	-1°-41'-18	conjunction	-1553 May 31 j 08:52	24° C 13'53	-1°-15'-57
minimum elong	-1561 May 12 j 13:57	6° C 19'03	1°41'18	minimum elong	-1553 May 31 j 08:53	24° C 13'53	1°15'56
max. Earth dist.	-1561 May 12 j 18:37	6° C 19'29	30.88969 AU	max. Earth dist.	-1553 May 31 j 04:56	24° C 13'31	30.95268 AU
retrograde	-1561 Aug 26 j 15:49	8° C 51'31		retrograde	-1553 Sep 13 j 12:51	26° C 44'58	
opposition	-1561 Nov 12 j 18:07	7° C 27'04	-1°-46'-54	opposition	-1553 Nov 30 j 05:15	25° C 21'06	-1°-19'-14
min. Earth dist.	-1561 Nov 12 j 14:09	7° C 27'21	28.89540 AU	min. Earth dist.	-1553 Nov 30 j 08:27	25° C 20'52	28.95645 AU

Attention, astronomical year style is used: The year -1552 in astronomical counting style is the year 1553 BCE in historical counting style.

direct	-1552 Feb 16 j 21:33	23° ♄ 56'08		direct	-1544 Mar 05 j 20:18	11° ♄ 43'18	
conjunction	-1552 Jun 01 j 22:52	26° ♄ 27'37	-1°-12'-14	conjunction	-1544 Jun 20 j 12:49	14° ♄ 15'08	0°-39'-10
minimum elong	-1552 Jun 01 j 22:53	26° ♄ 27'37	1°12'14	minimum elong	-1544 Jun 20 j 12:49	14° ♄ 15'08	0°39'10
max. Earth dist.	-1552 Jun 01 j 17:40	26° ♄ 27'08	30.95946 AU	max. Earth dist.	-1544 Jun 20 j 01:01	14° ♄ 14'03	31.04439 AU
retrograde	-1552 Sep 15 j 00:32	28° ♄ 58'31		retrograde	-1544 Oct 02 j 17:34	16° ♄ 44'42	
opposition	-1552 Dec 01 j 15:33	27° ♄ 34'41	-1°-15'-12	opposition	-1544 Dec 19 j 00:59	15° ♄ 21'36	0°-39'-31
min. Earth dist.	-1552 Dec 01 j 20:10	27° ♄ 34'22	28.96377 AU	min. Earth dist.	-1544 Dec 19 j 11:09	15° ♄ 20'53	29.04928 AU
direct	-1551 Feb 18 j 09:07	26° ♄ 09'41		direct	-1543 Mar 08 j 09:02	13° ♄ 56'29	
conjunction	-1551 Jun 04 j 12:39	28° ♄ 41'11	-1°-8'-25	conjunction	-1543 Jun 23 j 02:12	16° ♄ 28'19	0°-34'-43
minimum elong	-1551 Jun 04 j 12:40	28° ♄ 41'11	1°08'24	minimum elong	-1543 Jun 23 j 02:12	16° ♄ 28'19	0°34'43
max. Earth dist.	-1551 Jun 04 j 07:37	28° ♄ 40'43	30.96739 AU	max. Earth dist.	-1543 Jun 22 j 12:58	16° ♄ 27'06	31.05357 AU
retrograde	-1551 Jul 11 j 15:04	0° ♄		retrograde	-1543 Oct 05 j 04:06	18° ♄ 57'42	
opposition	-1551 Sep 17 j 12:38	1° ♄ 11'54		opposition	-1543 Dec 21 j 11:17	17° ♄ 34'38	0°-34'-44
min. Earth dist.	-1551 Nov 27 j 01:58	30° ♄		min. Earth dist.	-1543 Dec 21 j 23:05	17° ♄ 33'48	29.05811 AU
direct	-1551 Dec 04 j 01:43	29° ♄ 48'08	-1°-11'-4	direct	-1542 Mar 10 j 20:54	16° ♄ 09'28	
min. Earth dist.	-1551 Dec 04 j 06:25	29° ♄ 47'48	28.97221 AU	conjunction	-1542 Jun 25 j 15:42	18° ♄ 41'17	0°-30'-13
direct	-1550 Feb 20 j 23:26	28° ♄ 23'06		minimum elong	-1542 Jun 25 j 15:42	18° ♄ 41'17	0°30'13
	-1550 May 13 j 00:21	0° ♄		max. Earth dist.	-1542 Jun 25 j 02:12	18° ♄ 40'03	31.06211 AU
conjunction	-1550 Jun 07 j 02:25	0° ♄ 54'39	-1°-4'-30	retrograde	-1542 Oct 07 j 14:54	21° ♄ 10'28	
minimum elong	-1550 Jun 07 j 02:25	0° ♄ 54'39	1°04'30	opposition	-1542 Dec 23 j 21:19	19° ♄ 47'26	0°-29'-54
max. Earth dist.	-1550 Jun 06 j 19:44	0° ♄ 54'02	30.97659 AU	min. Earth dist.	-1542 Dec 24 j 09:38	19° ♄ 46'34	29.06628 AU
retrograde	-1550 Sep 20 j 00:12	3° ♄ 25'12		direct	-1541 Mar 13 j 11:05	18° ♄ 22'13	
opposition	-1550 Dec 06 j 11:47	2° ♄ 01'30	-1°-6'-49	conjunction	-1541 Jun 28 j 04:59	20° ♄ 54'02	0°-25'-42
min. Earth dist.	-1550 Dec 06 j 17:12	2° ♄ 01'07	28.98215 AU	minimum elong	-1541 Jun 28 j 04:59	20° ♄ 54'02	0°25'41
direct	-1549 Feb 23 j 10:42	0° ♄ 36'27		max. Earth dist.	-1541 Jun 27 j 13:41	20° ♄ 52'37	31.07019 AU
conjunction	-1549 Jun 09 j 16:20	3° ♄ 08'03	-1°00'-29	retrograde	-1541 Oct 10 j 02:12	23° ♄ 23'01	
minimum elong	-1549 Jun 09 j 16:20	3° ♄ 08'03	1°00'28	opposition	-1541 Dec 26 j 07:29	22° ♄ 00'01	0°-25'-2
max. Earth dist.	-1549 Jun 09 j 10:01	3° ♄ 07'28	30.98719 AU	min. Earth dist.	-1541 Dec 26 j 20:36	21° ♄ 59'06	29.07442 AU
retrograde	-1549 Sep 22 j 11:16	5° ♄ 38'26		direct	-1540 Mar 14 j 22:39	20° ♄ 34'44	
opposition	-1549 Dec 08 j 21:58	4° ♄ 14'51	-1°-2'-29	conjunction	-1540 Jun 29 j 18:06	23° ♄ 06'32	0°-21'-8
min. Earth dist.	-1549 Dec 09 j 04:11	4° ♄ 14'25	28.99321 AU	minimum elong	-1540 Jun 29 j 18:06	23° ♄ 06'32	0°21'07
direct	-1548 Feb 25 j 23:26	2° ♄ 49'48		max. Earth dist.	-1540 Jun 29 j 03:15	23° ♄ 05'10	31.07839 AU
conjunction	-1548 Jun 11 j 05:55	5° ♄ 21'28	0°-56'-22	retrograde	-1540 Oct 11 j 12:32	25° ♄ 35'19	
minimum elong	-1548 Jun 11 j 05:55	5° ♄ 21'28	0°56'22	opposition	-1540 Dec 27 j 17:39	24° ♄ 12'22	0°-20'-9
max. Earth dist.	-1548 Jun 10 j 21:44	5° ♄ 20'42	30.99884 AU	min. Earth dist.	-1540 Dec 28 j 07:34	24° ♄ 11'23	29.08280 AU
retrograde	-1548 Sep 24 j 00:06	7° ♄ 51'41		direct	-1539 Mar 17 j 12:14	22° ♄ 47'03	
opposition	-1548 Dec 10 j 08:04	6° ♄ 28'13	0°-58'-2	conjunction	-1539 Jul 02 j 06:59	25° ♄ 18'50	0°-16'-33
min. Earth dist.	-1548 Dec 10 j 14:28	6° ♄ 27'46	29.00519 AU	minimum elong	-1539 Jul 02 j 06:59	25° ♄ 18'50	0°16'32
direct	-1547 Feb 27 j 10:39	5° ♄ 03'11		max. Earth dist.	-1539 Jul 01 j 14:27	25° ♄ 17'18	31.08721 AU
conjunction	-1547 Jun 13 j 19:42	7° ♄ 34'54	0°-52'-11	retrograde	-1539 Oct 14 j 00:35	27° ♄ 47'26	
minimum elong	-1547 Jun 13 j 19:43	7° ♄ 34'54	0°52'10	opposition	-1539 Dec 30 j 03:38	26° ♄ 24'32	0°-15'-14
max. Earth dist.	-1547 Jun 13 j 11:38	7° ♄ 34'09	31.01097 AU	min. Earth dist.	-1539 Dec 30 j 17:24	26° ♄ 23'34	29.09216 AU
retrograde	-1547 Sep 26 j 09:35	10° ♄ 04'59		direct	-1538 Mar 20 j 00:15	24° ♄ 59'11	
opposition	-1547 Dec 12 j 18:16	8° ♄ 41'38	0°-53'-31	conjunction	-1538 Jul 04 j 19:56	27° ♄ 30'58	0°-11'-56
min. Earth dist.	-1547 Dec 13 j 02:23	8° ♄ 41'03	29.01730 AU	minimum elong	-1538 Jul 04 j 19:57	27° ♄ 30'58	0°11'56
direct	-1546 Mar 01 j 21:28	7° ♄ 16'36		behind sun begin	-1538 Jul 04 j 15:28	27° ♄ 30'34	
conjunction	-1546 Jun 16 j 09:21	9° ♄ 48'22	0°-47'-54	behind sun end	-1538 Jul 05 j 00:25	27° ♄ 31'22	
minimum elong	-1546 Jun 16 j 09:21	9° ♄ 48'22	0°47'54	max. Earth dist.	-1538 Jul 04 j 03:56	27° ♄ 29'29	31.09704 AU
max. Earth dist.	-1546 Jun 15 j 23:31	9° ♄ 47'27	31.02301 AU	retrograde	-1538 Oct 16 j 09:33	29° ♄ 59'24	
retrograde	-1546 Sep 28 j 20:36	12° ♄ 18'17		opposition	-1537 Jan 01 j 13:53	28° ♄ 36'34	0°-10'-17
opposition	-1546 Dec 15 j 04:26	10° ♄ 55'02	0°-48'-55	min. Earth dist.	-1537 Jan 02 j 04:54	28° ♄ 35'31	29.10258 AU
min. Earth dist.	-1546 Dec 15 j 12:37	10° ♄ 54'27	29.02894 AU	direct	-1537 Mar 22 j 11:52	27° ♄ 11'13	
direct	-1545 Mar 04 j 09:51	9° ♄ 29'59		conjunction	-1537 Jul 07 j 08:42	29° ♄ 43'01	0°-7'-20
conjunction	-1545 Jun 18 j 23:09	12° ♄ 01'48	0°-43'-34	minimum elong	-1537 Jul 07 j 08:42	29° ♄ 43'01	0°07'19
minimum elong	-1545 Jun 18 j 23:10	12° ♄ 01'48	0°43'33	behind sun begin	-1537 Jul 07 j 02:41	29° ♄ 42'29	
max. Earth dist.	-1545 Jun 18 j 12:34	12° ♄ 00'49	31.03414 AU	behind sun end	-1537 Jul 07 j 14:42	29° ♄ 43'33	
retrograde	-1545 Oct 01 j 06:33	14° ♄ 31'33		max. Earth dist.	-1537 Jul 06 j 15:29	29° ♄ 41'26	31.10815 AU
opposition	-1545 Dec 17 j 14:44	13° ♄ 08'23	0°-44'-14	retrograde	-1537 Jul 15 j 00:13	0° ♄	
min. Earth dist.	-1545 Dec 18 j 00:54	13° ♄ 07'40	29.03963 AU		-1537 Oct 18 j 20:10	2° ♄ 11'19	

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Attention, astronomical year style is used: The year -1536 in astronomical counting style is the year 1537 BCE in historical counting style.

opposition	-1536 Jan 03 j 23:56	0° $\mathring{48}'35''$	0°-5'-20	opposition	-1529 Jan 19 j 00:21	16° $\mathring{13}'46''$	0°29'06
min. Earth dist.	-1536 Jan 04 j 14:22	0° $\mathring{47}'34''$	29.11424 AU	min. Earth dist.	-1529 Jan 19 j 19:35	16° $\mathring{12}'26''$	29.19196 AU
	-1536 Feb 03 j 17:07	30° $\mathring{R}II$		direct	-1529 Apr 09 j 11:24	14° $\mathring{48}'33''$	
direct	-1536 Mar 23 j 23:45	29° $\mathring{II}23'15$					
	-1536 May 11 j 05:56	0° $\mathring{0}$		conjunction	-1529 Jul 25 j 12:51	17° $\mathring{20}'26''$	0°29'33
				minimum elong	-1529 Jul 25 j 12:51	17° $\mathring{20}'26''$	0°29'34
conjunction	-1536 Jul 08 j 21:28	1° $\mathring{55}'04''$	0°-2'-42	max. Earth dist.	-1529 Jul 24 j 14:56	17° $\mathring{18}'24''$	31.19527 AU
minimum elong	-1536 Jul 08 j 21:29	1° $\mathring{55}'04''$	0°02'41	retrograde	-1529 Nov 05 j 08:27	19° $\mathring{47}'46''$	
behind sun begin	-1536 Jul 08 j 14:55	1° $\mathring{54}'30''$		opposition	-1528 Jan 21 j 10:53	18° $\mathring{25}'38''$	0°33'54
behind sun end	-1536 Jul 09 j 04:02	1° $\mathring{55}'39''$		min. Earth dist.	-1528 Jan 22 j 07:36	18° $\mathring{24}'11''$	29.19909 AU
max. Earth dist.	-1536 Jul 08 j 04:21	1° $\mathring{53}'30''$	31.12032 AU	direct	-1528 Apr 10 j 23:52	17° $\mathring{00}'23''$	
retrograde	-1536 Oct 20 j 05:55	4° $\mathring{23}'15''$		max. Earth dist.	-1528 Jul 26 j 01:43	19° $\mathring{30}'03''$	31.20221 AU
opposition	-1535 Jan 05 j 10:15	3° $\mathring{00}'38''$	0°00'-22				
min. Earth dist.	-1535 Jan 06 j 02:04	2° $\mathring{59}'31''$	29.12690 AU	conjunction	-1528 Jul 27 j 00:50	19° $\mathring{32}'12''$	0°34'00
asc. node	-1535 Feb 03 j 04:22	2° $\mathring{14}'51''$		minimum elong	-1528 Jul 27 j 00:50	19° $\mathring{32}'11''$	0°34'02
direct	-1535 Mar 26 j 09:20	1° $\mathring{35}'20''$		retrograde	-1528 Nov 06 j 18:53	21° $\mathring{59}'23''$	
				opposition	-1527 Jan 22 j 21:15	20° $\mathring{37}'15''$	0°38'38
conjunction	-1535 Jul 11 j 10:00	4° $\mathring{07}'12''$	0°02'04	min. Earth dist.	-1527 Jan 23 j 17:24	20° $\mathring{35}'51''$	29.20593 AU
minimum elong	-1535 Jul 11 j 10:00	4° $\mathring{07}'12''$	0°02'05	direct	-1527 Apr 13 j 12:30	19° $\mathring{11}'58''$	
behind sun begin	-1535 Jul 11 j 03:26	4° $\mathring{06}'37''$					
behind sun end	-1535 Jul 11 j 16:34	4° $\mathring{07}'47''$		conjunction	-1527 Jul 29 j 12:40	21° $\mathring{43}'43''$	0°38'25
max. Earth dist.	-1535 Jul 10 j 16:16	4° $\mathring{05}'34''$	31.13331 AU	minimum elong	-1527 Jul 29 j 12:40	21° $\mathring{43}'43''$	0°38'26
retrograde	-1535 Oct 22 j 16:26	6° $\mathring{35}'17''$		max. Earth dist.	-1527 Jul 28 j 13:46	21° $\mathring{41}'36''$	31.20896 AU
opposition	-1534 Jan 07 j 20:25	5° $\mathring{12}'46''$	0°04'34	retrograde	-1527 Nov 09 j 04:15	24° $\mathring{10}'46''$	
min. Earth dist.	-1534 Jan 08 j 11:56	5° $\mathring{11}'41''$	29.13987 AU	opposition	-1526 Jan 25 j 07:47	22° $\mathring{48}'39''$	0°43'18
direct	-1534 Mar 28 j 21:12	3° $\mathring{47}'31''$		min. Earth dist.	-1526 Jan 26 j 05:10	22° $\mathring{47}'10''$	29.21292 AU
				direct	-1526 Apr 15 j 23:07	21° $\mathring{23}'20''$	
conjunction	-1534 Jul 13 j 22:39	6° $\mathring{19}'25''$	0°06'42	max. Earth dist.	-1526 Jul 31 j 01:13	23° $\mathring{52}'53''$	31.21620 AU
minimum elong	-1534 Jul 13 j 22:39	6° $\mathring{19}'25''$	0°06'44				
behind sun begin	-1534 Jul 13 j 16:32	6° $\mathring{18}'52''$		conjunction	-1526 Aug 01 j 00:24	23° $\mathring{55}'02''$	0°42'45
behind sun end	-1534 Jul 14 j 04:47	6° $\mathring{19}'58''$		minimum elong	-1526 Aug 01 j 00:24	23° $\mathring{55}'02''$	0°42'47
max. Earth dist.	-1534 Jul 13 j 03:53	6° $\mathring{17}'41''$	31.14613 AU	retrograde	-1526 Nov 11 j 13:14	26° $\mathring{21}'56''$	
retrograde	-1534 Oct 25 j 02:51	8° $\mathring{47}'24''$		opposition	-1525 Jan 27 j 18:08	24° $\mathring{59}'51''$	0°47'55
opposition	-1533 Jan 10 j 06:40	7° $\mathring{25}'00''$	0°09'32	min. Earth dist.	-1525 Jan 28 j 14:46	24° $\mathring{58}'25''$	29.22048 AU
min. Earth dist.	-1533 Jan 10 j 23:38	7° $\mathring{23}'49''$	29.15256 AU	direct	-1525 Apr 18 j 11:41	23° $\mathring{34}'31''$	
direct	-1533 Mar 31 j 08:09	5° $\mathring{59}'47''$					
				conjunction	-1525 Aug 03 j 12:04	26° $\mathring{06}'10''$	0°47'02
conjunction	-1533 Jul 16 j 11:21	8° $\mathring{31}'43''$	0°11'19	minimum elong	-1525 Aug 03 j 12:04	26° $\mathring{06}'10''$	0°47'03
minimum elong	-1533 Jul 16 j 11:21	8° $\mathring{31}'43''$	0°11'20	max. Earth dist.	-1525 Aug 02 j 12:28	26° $\mathring{03}'58''$	31.22416 AU
behind sun begin	-1533 Jul 16 j 06:37	8° $\mathring{31}'18''$		retrograde	-1525 Nov 13 j 22:32	28° $\mathring{32}'59''$	
behind sun end	-1533 Jul 16 j 16:06	8° $\mathring{32}'08''$		opposition	-1524 Jan 30 j 04:45	27° $\mathring{10}'55''$	0°52'27
max. Earth dist.	-1533 Jul 15 j 16:27	8° $\mathring{29}'58''$	31.15838 AU	min. Earth dist.	-1524 Jan 31 j 02:02	27° $\mathring{09}'26''$	29.22909 AU
retrograde	-1533 Oct 27 j 13:31	10° $\mathring{59}'35''$		direct	-1524 Apr 19 j 22:03	25° $\mathring{45}'36''$	
opposition	-1532 Jan 12 j 17:07	9° $\mathring{37}'17''$	0°14'28				
min. Earth dist.	-1532 Jan 13 j 10:32	9° $\mathring{36}'04''$	29.16422 AU	conjunction	-1524 Aug 04 j 23:30	28° $\mathring{17}'12''$	0°51'15
direct	-1532 Apr 01 j 21:29	8° $\mathring{12}'06''$		minimum elong	-1524 Aug 04 j 23:30	28° $\mathring{17}'12''$	0°51'16
				max. Earth dist.	-1524 Aug 04 j 00:35	28° $\mathring{15}'04''$	31.23324 AU
conjunction	-1532 Jul 17 j 23:43	10° $\mathring{44}'02''$	0°15'55		-1524 Sep 24 j 19:24	0° $\mathring{0}$	
minimum elong	-1532 Jul 17 j 23:43	10° $\mathring{44}'02''$	0°15'57	retrograde	-1524 Nov 15 j 07:57	0° $\mathring{43}'56''$	
max. Earth dist.	-1532 Jul 17 j 03:08	10° $\mathring{42}'07''$	31.16942 AU		-1523 Jan 07 j 19:39	30° $\mathring{R}\mathring{0}$	
retrograde	-1532 Oct 29 j 00:56	13° $\mathring{11}'48''$		opposition	-1523 Jan 31 j 15:19	29° $\mathring{21}'56''$	0°56'55
opposition	-1531 Jan 14 j 03:34	11° $\mathring{49}'33''$	0°19'23	min. Earth dist.	-1523 Feb 01 j 12:24	29° $\mathring{20}'28''$	29.23851 AU
min. Earth dist.	-1531 Jan 14 j 21:41	11° $\mathring{48}'17''$	29.17477 AU	direct	-1523 Apr 22 j 10:08	27° $\mathring{56}'38''$	
direct	-1531 Apr 04 j 08:19	10° $\mathring{24}'22''$			-1523 Jul 25 j 17:28	0° $\mathring{0}$	
				max. Earth dist.	-1523 Aug 06 j 11:02	0° $\mathring{26}'01''$	31.24298 AU
conjunction	-1531 Jul 20 j 12:15	12° $\mathring{56}'18''$	0°20'30				
minimum elong	-1531 Jul 20 j 12:15	12° $\mathring{56}'18''$	0°20'31	conjunction	-1523 Aug 07 j 10:54	0° $\mathring{28}'13''$	0°55'23
max. Earth dist.	-1531 Jul 19 j 15:56	12° $\mathring{54}'25''$	31.17924 AU	minimum elong	-1523 Aug 07 j 10:54	0° $\mathring{28}'13''$	0°55'24
retrograde	-1531 Oct 31 j 11:35	15° $\mathring{23}'55''$		retrograde	-1523 Nov 17 j 19:10	2° $\mathring{54}'54''$	
opposition	-1530 Jan 16 j 13:58	14° $\mathring{01}'44''$	0°24'16	opposition	-1522 Feb 03 j 01:44	1° $\mathring{32}'57''$	1°01'18
min. Earth dist.	-1530 Jan 17 j 09:10	14° $\mathring{00}'24''$	29.18391 AU	min. Earth dist.	-1522 Feb 03 j 23:00	1° $\mathring{31}'29''$	29.24855 AU
direct	-1530 Apr 06 j 22:23	12° $\mathring{36}'33''$		direct	-1522 Apr 24 j 20:19	0° $\mathring{07}'42''$	
max. Earth dist.	-1530 Jul 22 j 02:17	15° $\mathring{06}'23''$	31.18780 AU				
				conjunction	-1522 Aug 09 j 22:26	2° $\mathring{39}'17''$	0°59'26
conjunction	-1530 Jul 23 j 00:34	15° $\mathring{08}'27''$	0°25'02	minimum elong	-1522 Aug 09 j 22:26	2° $\mathring{39}'17''$	0°59'28
minimum elong	-1530 Jul 23 j 00:34	15° $\mathring{08}'27''$	0°25'04	max. Earth dist.	-1522 Aug 08 j 23:25	2° $\mathring{37}'09''$	31.25294 AU
retrograde	-1530 Nov 02 j 23:46	17° $\mathring{35}'56''$		retrograde	-1522 Nov 20 j 05:25	5° $\mathring{05}'54''$	

Attention, astronomical year style is used: The year -1521 in astronomical counting style is the year 1522 BCE in historical counting style.

opposition	-1521 Feb 05 j 12:29	3°044'02	1°05'35	opposition	-1513 Feb 23 j 03:45	21°011'30	1°35'55
min. Earth dist.	-1521 Feb 06 j 10:29	3°042'31	29.25833 AU	min. Earth dist.	-1513 Feb 24 j 02:55	21°009'55	29.30084 AU
direct	-1521 Apr 27 j 09:40	2°018'50		direct	-1513 May 15 j 07:12	19°046'23	
max. Earth dist.	-1521 Aug 11 j 09:16	4°048'09	31.26240 AU	max. Earth dist.	-1513 Aug 29 j 00:50	22°015'16	31.30169 AU
conjunction	-1521 Aug 12 j 09:41	4°050'25	1°03'25	conjunction	-1513 Aug 30 j 00:56	22°017'30	1°31'21
minimum elong	-1521 Aug 12 j 09:40	4°050'25	1°03'26	minimum elong	-1513 Aug 30 j 00:56	22°017'30	1°31'22
retrograde	-1521 Nov 22 j 17:32	7°016'59		retrograde	-1513 Dec 09 j 22:47	24°043'40	
opposition	-1520 Feb 07 j 23:14	5°055'10	1°09'46	opposition	-1512 Feb 25 j 14:55	23°021'54	1°39'08
min. Earth dist.	-1520 Feb 08 j 20:50	5°053'40	29.26747 AU	min. Earth dist.	-1512 Feb 26 j 14:08	23°020'18	29.30494 AU
direct	-1520 Apr 28 j 21:57	4°030'01		direct	-1512 May 16 j 20:22	21°056'49	
conjunction	-1520 Aug 13 j 21:06	7°001'34	1°07'17	max. Earth dist.	-1512 Aug 30 j 10:27	24°025'33	31.30633 AU
minimum elong	-1520 Aug 13 j 21:05	7°001'34	1°07'19	conjunction	-1512 Aug 31 j 11:12	24°027'52	1°34'18
max. Earth dist.	-1520 Aug 12 j 21:16	6°059'21	31.27089 AU	minimum elong	-1512 Aug 31 j 11:12	24°027'52	1°34'19
retrograde	-1520 Nov 24 j 02:52	9°028'05		retrograde	-1512 Dec 11 j 10:32	26°054'01	
opposition	-1519 Feb 09 j 10:10	8°006'20	1°13'52	opposition	-1511 Feb 27 j 01:53	25°032'15	1°42'13
min. Earth dist.	-1519 Feb 10 j 09:07	8°004'45	29.27545 AU	min. Earth dist.	-1511 Feb 27 j 23:55	25°030'45	29.31018 AU
direct	-1519 May 01 j 09:59	6°041'13		direct	-1511 May 19 j 07:49	24°007'12	
max. Earth dist.	-1519 Aug 15 j 07:17	9°010'25	31.27820 AU	conjunction	-1511 Sep 02 j 21:32	26°038'13	1°37'06
conjunction	-1519 Aug 16 j 08:12	9°012'44	1°11'04	minimum elong	-1511 Sep 02 j 21:32	26°038'13	1°37'07
minimum elong	-1519 Aug 16 j 08:12	9°012'44	1°11'05	max. Earth dist.	-1511 Sep 01 j 22:04	26°036'02	31.31192 AU
retrograde	-1519 Nov 26 j 13:47	11°039'11		retrograde	-1511 Dec 13 j 19:56	29°004'22	
opposition	-1518 Feb 11 j 20:59	10°017'28	1°17'51	opposition	-1510 Mar 01 j 13:06	27°042'39	1°45'08
min. Earth dist.	-1518 Feb 12 j 19:20	10°015'55	29.28205 AU	min. Earth dist.	-1510 Mar 02 j 11:51	27°041'06	29.31610 AU
direct	-1518 May 03 j 22:53	8°052'22		direct	-1510 May 21 j 19:21	26°017'40	
conjunction	-1518 Aug 18 j 19:27	11°023'51	1°14'44	max. Earth dist.	-1510 Sep 04 j 07:56	28°046'25	31.31808 AU
minimum elong	-1518 Aug 18 j 19:26	11°023'51	1°14'46	conjunction	-1510 Sep 05 j 07:42	28°048'38	1°39'46
max. Earth dist.	-1518 Aug 17 j 18:34	11°021'32	31.28396 AU	minimum elong	-1510 Sep 05 j 07:41	28°048'38	1°39'48
retrograde	-1518 Nov 28 j 23:32	13°050'15			-1510 Oct 08 j 12:09	0°00'00	
opposition	-1517 Feb 14 j 07:56	12°028'33	1°21'43	retrograde	-1510 Dec 16 j 07:14	1°00'14'47	
min. Earth dist.	-1517 Feb 15 j 07:37	12°026'55	29.28725 AU		-1509 Feb 27 j 19:24	30°00'00	
direct	-1517 May 06 j 09:56	11°003'27		opposition	-1509 Mar 04 j 00:13	29°053'07	1°47'55
max. Earth dist.	-1517 Aug 20 j 05:18	13°032'32	31.28854 AU	min. Earth dist.	-1509 Mar 04 j 21:46	29°051'38	29.32230 AU
conjunction	-1517 Aug 21 j 06:28	13°034'53	1°18'18	direct	-1509 May 24 j 08:35	28°028'12	
minimum elong	-1517 Aug 21 j 06:28	13°034'53	1°18'19		-1509 Aug 11 j 15:07	0°00'00	
retrograde	-1517 Sep 30 j 18:29	15°00'00		conjunction	-1509 Sep 07 j 17:56	0°00'59'08	1°42'18
	-1517 Dec 01 j 08:31	16°001'13		minimum elong	-1509 Sep 07 j 17:56	0°00'59'08	1°42'18
	-1516 Feb 04 j 05:45	15°00'00		max. Earth dist.	-1509 Sep 06 j 18:48	0°00'56'58	31.32412 AU
opposition	-1516 Feb 16 j 18:53	14°039'31	1°25'27	retrograde	-1509 Dec 18 j 17:53	3°00'25'18	
min. Earth dist.	-1516 Feb 17 j 17:55	14°037'56	29.29124 AU	opposition	-1508 Mar 05 j 11:41	2°00'03'39	1°50'32
direct	-1516 May 07 j 22:49	13°014'25		min. Earth dist.	-1508 Mar 06 j 10:02	2°00'02'08	29.32827 AU
	-1516 Aug 01 j 22:00	15°00'00		direct	-1508 May 25 j 20:01	0°00'38'49	
conjunction	-1516 Aug 22 j 17:12	15°045'46	1°21'45	max. Earth dist.	-1508 Sep 08 j 05:06	3°00'07'33	31.32973 AU
minimum elong	-1516 Aug 22 j 17:11	15°045'46	1°21'46	conjunction	-1508 Sep 09 j 03:58	3°00'09'41	1°44'41
max. Earth dist.	-1516 Aug 21 j 15:33	15°043'23	31.29202 AU	minimum elong	-1508 Sep 09 j 03:58	3°00'09'41	1°44'42
retrograde	-1516 Dec 02 j 17:38	18°012'04		retrograde	-1508 Dec 20 j 02:49	5°00'35'53	
opposition	-1515 Feb 18 j 05:54	16°050'20	1°29'04	opposition	-1507 Mar 07 j 23:04	4°00'14'15	1°53'00
min. Earth dist.	-1515 Feb 19 j 05:37	16°048'43	29.29453 AU	min. Earth dist.	-1507 Mar 08 j 20:31	4°00'12'47	29.33337 AU
direct	-1515 May 10 j 09:09	15°025'14		direct	-1507 May 28 j 08:46	2°00'49'28	
max. Earth dist.	-1515 Aug 24 j 03:04	17°054'11	31.29507 AU	conjunction	-1507 Sep 11 j 14:07	5°00'20'16	1°46'55
conjunction	-1515 Aug 25 j 03:57	17°056'31	1°25'04	minimum elong	-1507 Sep 11 j 14:07	5°00'20'16	1°46'54
minimum elong	-1515 Aug 25 j 03:56	17°056'31	1°25'05	max. Earth dist.	-1507 Sep 10 j 14:48	5°00'18'06	31.33420 AU
retrograde	-1515 Dec 05 j 02:20	20°022'44		retrograde	-1507 Dec 22 j 12:20	7°00'46'29	
opposition	-1514 Feb 20 j 16:44	19°001'00	1°32'34	opposition	-1506 Mar 10 j 10:29	6°00'24'52	1°55'18
min. Earth dist.	-1514 Feb 21 j 16:16	18°059'23	29.29746 AU	min. Earth dist.	-1506 Mar 11 j 08:28	6°00'23'22	29.33736 AU
direct	-1514 May 12 j 20:54	17°035'53		direct	-1506 May 30 j 19:02	5°00'00'07	
conjunction	-1514 Aug 27 j 14:29	20°007'04	1°28'17	max. Earth dist.	-1506 Sep 13 j 01:50	7°00'28'45	31.33746 AU
minimum elong	-1514 Aug 27 j 14:28	20°007'04	1°28'18	conjunction	-1506 Sep 14 j 00:19	7°00'30'51	1°48'59
max. Earth dist.	-1514 Aug 26 j 12:53	20°004'41	31.29806 AU	minimum elong	-1506 Sep 14 j 00:18	7°00'30'51	1°49'00
retrograde	-1514 Dec 07 j 13:07	22°033'16		retrograde	-1506 Dec 24 j 21:14	9°00'57'05	

Attention, astronomical year style is used: The year -1505 in astronomical counting style is the year 1506 BCE in historical counting style.

opposition	-1505 Mar 12 j 22:07	8° $\mathring{\mu}$ 35'27	1°57'26	conjunction	-1497 Oct 03 j 14:46	27° $\mathring{\mu}$ 02'31	2°00'27
min. Earth dist.	-1505 Mar 13 j 19:55	8° $\mathring{\mu}$ 33'58	29.33985 AU	minimum elong	-1497 Oct 03 j 14:46	27° $\mathring{\mu}$ 02'31	2°00'26
direct	-1505 Jun 02 j 07:03	7° $\mathring{\mu}$ 10'44		max. Earth dist.	-1497 Oct 02 j 21:17	27° $\mathring{\mu}$ 00'53	31.34345 AU
max. Earth dist.	-1505 Sep 15 j 10:56	9° $\mathring{\mu}$ 39'12	31.33926 AU	retrograde	-1496 Jan 13 j 16:36	29° $\mathring{\mu}$ 29'10	
				opposition	-1496 Apr 01 j 08:05	28° $\mathring{\mu}$ 07'19	2°08'53
conjunction	-1505 Sep 16 j 10:12	9° $\mathring{\mu}$ 41'22	1°50'55	min. Earth dist.	-1496 Apr 02 j 01:15	28° $\mathring{\mu}$ 06'09	29.34577 AU
minimum elong	-1505 Sep 16 j 10:12	9° $\mathring{\mu}$ 41'22	1°50'55	direct	-1496 Jun 21 j 16:05	26° $\mathring{\mu}$ 43'00	
retrograde	-1505 Dec 27 j 08:08	12° $\mathring{\mu}$ 07'37		max. Earth dist.	-1496 Oct 04 j 06:13	29° $\mathring{\mu}$ 11'15	31.34510 AU
opposition	-1504 Mar 14 j 09:46	10° $\mathring{\mu}$ 45'57	1°59'25				
min. Earth dist.	-1504 Mar 15 j 07:13	10° $\mathring{\mu}$ 44'30	29.34112 AU	conjunction	-1496 Oct 05 j 00:06	29° $\mathring{\mu}$ 12'56	2°00'52
direct	-1504 Jun 03 j 17:38	9° $\mathring{\mu}$ 21'15		minimum elong	-1496 Oct 05 j 00:06	29° $\mathring{\mu}$ 12'56	2°00'53
					-1496 Oct 26 j 05:28	0° $\mathring{\mu}$	
conjunction	-1504 Sep 17 j 20:14	11° $\mathring{\mu}$ 51'48	1°52'41	retrograde	-1495 Jan 15 j 03:59	1° $\mathring{\mu}$ 39'42	
minimum elong	-1504 Sep 17 j 20:14	11° $\mathring{\mu}$ 51'48	1°52'42	opposition	-1495 Apr 03 j 20:03	0° $\mathring{\mu}$ 17'52	2°09'16
max. Earth dist.	-1504 Sep 16 j 22:15	11° $\mathring{\mu}$ 49'44	31.33986 AU	min. Earth dist.	-1495 Apr 04 j 12:34	0° $\mathring{\mu}$ 16'45	29.34715 AU
retrograde	-1504 Dec 28 j 17:20	14° $\mathring{\mu}$ 18'03			-1495 Apr 14 j 22:05	30° $\mathring{\mu}$	
opposition	-1503 Mar 16 j 21:23	12° $\mathring{\mu}$ 56'20	2°01'13	direct	-1495 Jun 24 j 02:06	28° $\mathring{\mu}$ 53'38	
min. Earth dist.	-1503 Mar 17 j 19:10	12° $\mathring{\mu}$ 54'51	29.34119 AU		-1495 Aug 29 j 01:34	0° $\mathring{\mu}$	
direct	-1503 Jun 06 j 05:57	11° $\mathring{\mu}$ 31'38					
max. Earth dist.	-1503 Sep 19 j 07:15	13° $\mathring{\mu}$ 59'57	31.33957 AU	conjunction	-1495 Oct 07 j 09:37	1° $\mathring{\mu}$ 23'31	2°01'08
				minimum elong	-1495 Oct 07 j 09:37	1° $\mathring{\mu}$ 23'31	2°01'07
conjunction	-1503 Sep 20 j 05:58	14° $\mathring{\mu}$ 02'05	1°54'17	max. Earth dist.	-1495 Oct 06 j 17:14	1° $\mathring{\mu}$ 21'58	31.34591 AU
minimum elong	-1503 Sep 20 j 05:58	14° $\mathring{\mu}$ 02'05	1°54'17	retrograde	-1494 Jan 17 j 13:41	3° $\mathring{\mu}$ 50'23	
retrograde	-1503 Dec 31 j 04:49	16° $\mathring{\mu}$ 28'20		opposition	-1494 Apr 06 j 08:21	2° $\mathring{\mu}$ 28'32	2°09'26
opposition	-1502 Mar 19 j 08:57	15° $\mathring{\mu}$ 06'34	2°02'51	min. Earth dist.	-1494 Apr 07 j 01:01	2° $\mathring{\mu}$ 27'25	29.34731 AU
min. Earth dist.	-1502 Mar 20 j 05:34	15° $\mathring{\mu}$ 05'10	29.34063 AU	direct	-1494 Jun 26 j 13:33	1° $\mathring{\mu}$ 04'23	
direct	-1502 Jun 08 j 17:08	13° $\mathring{\mu}$ 41'52					
				conjunction	-1494 Oct 09 j 18:55	3° $\mathring{\mu}$ 34'12	2°01'13
conjunction	-1502 Sep 22 j 15:40	16° $\mathring{\mu}$ 12'13	1°55'44	minimum elong	-1494 Oct 09 j 18:55	3° $\mathring{\mu}$ 34'12	2°01'13
minimum elong	-1502 Sep 22 j 15:39	16° $\mathring{\mu}$ 12'13	1°55'44	max. Earth dist.	-1494 Oct 09 j 01:57	3° $\mathring{\mu}$ 32'36	31.34544 AU
max. Earth dist.	-1502 Sep 21 j 18:18	16° $\mathring{\mu}$ 10'13	31.33877 AU	retrograde	-1493 Jan 20 j 01:39	6° $\mathring{\mu}$ 01'10	
retrograde	-1501 Jan 02 j 14:14	18° $\mathring{\mu}$ 38'29		opposition	-1493 Apr 08 j 20:37	4° $\mathring{\mu}$ 39'18	2°09'26
opposition	-1501 Mar 21 j 20:44	17° $\mathring{\mu}$ 16'40	2°04'18	min. Earth dist.	-1493 Apr 09 j 12:00	4° $\mathring{\mu}$ 38'16	29.34611 AU
min. Earth dist.	-1501 Mar 22 j 17:51	17° $\mathring{\mu}$ 15'14	29.33991 AU	direct	-1493 Jun 28 j 23:44	3° $\mathring{\mu}$ 15'12	
direct	-1501 Jun 11 j 04:57	15° $\mathring{\mu}$ 51'59					
max. Earth dist.	-1501 Sep 24 j 04:00	18° $\mathring{\mu}$ 20'15	31.33831 AU	conjunction	-1493 Oct 12 j 04:26	5° $\mathring{\mu}$ 44'56	2°01'07
				minimum elong	-1493 Oct 12 j 04:26	5° $\mathring{\mu}$ 44'56	2°01'07
conjunction	-1501 Sep 25 j 01:10	18° $\mathring{\mu}$ 22'13	1°57'00	max. Earth dist.	-1493 Oct 11 j 12:33	5° $\mathring{\mu}$ 43'27	31.34341 AU
minimum elong	-1501 Sep 25 j 01:10	18° $\mathring{\mu}$ 22'13	1°57'00	retrograde	-1492 Jan 22 j 12:03	8° $\mathring{\mu}$ 12'00	
retrograde	-1500 Jan 05 j 01:29	20° $\mathring{\mu}$ 48'32		opposition	-1492 Apr 10 j 09:05	6° $\mathring{\mu}$ 50'06	2°09'15
opposition	-1500 Mar 23 j 08:27	19° $\mathring{\mu}$ 26'40	2°05'35	min. Earth dist.	-1492 Apr 11 j 01:06	6° $\mathring{\mu}$ 49'01	29.34335 AU
min. Earth dist.	-1500 Mar 24 j 03:48	19° $\mathring{\mu}$ 25'21	29.33977 AU	direct	-1492 Jun 30 j 11:16	5° $\mathring{\mu}$ 26'02	
direct	-1500 Jun 12 j 18:10	18° $\mathring{\mu}$ 02'02					
				conjunction	-1492 Oct 13 j 13:42	7° $\mathring{\mu}$ 55'40	2°00'52
conjunction	-1500 Sep 26 j 10:34	20° $\mathring{\mu}$ 32'11	1°58'07	minimum elong	-1492 Oct 13 j 13:42	7° $\mathring{\mu}$ 55'40	2°00'52
minimum elong	-1500 Sep 26 j 10:34	20° $\mathring{\mu}$ 32'11	1°58'08	max. Earth dist.	-1492 Oct 12 j 21:53	7° $\mathring{\mu}$ 54'11	31.33996 AU
max. Earth dist.	-1500 Sep 25 j 14:25	20° $\mathring{\mu}$ 30'18	31.33849 AU	retrograde	-1491 Jan 24 j 00:08	10° $\mathring{\mu}$ 22'49	
retrograde	-1499 Jan 06 j 12:08	22° $\mathring{\mu}$ 58'33		opposition	-1491 Apr 12 j 21:22	9° $\mathring{\mu}$ 00'50	2°08'53
opposition	-1499 Mar 25 j 20:18	21° $\mathring{\mu}$ 36'40	2°06'41	min. Earth dist.	-1491 Apr 13 j 11:56	8° $\mathring{\mu}$ 59'51	29.33905 AU
min. Earth dist.	-1499 Mar 26 j 15:49	21° $\mathring{\mu}$ 35'20	29.34048 AU	direct	-1491 Jul 03 j 00:45	7° $\mathring{\mu}$ 36'47	
direct	-1499 Jun 15 j 05:36	20° $\mathring{\mu}$ 12'05					
				conjunction	-1491 Oct 15 j 23:01	10° $\mathring{\mu}$ 06'19	2°00'26
conjunction	-1499 Sep 28 j 20:01	22° $\mathring{\mu}$ 42'10	1°59'04	minimum elong	-1491 Oct 15 j 23:02	10° $\mathring{\mu}$ 06'19	2°00'25
minimum elong	-1499 Sep 28 j 20:01	22° $\mathring{\mu}$ 42'10	1°59'03	max. Earth dist.	-1491 Oct 15 j 07:44	10° $\mathring{\mu}$ 04'53	31.33498 AU
max. Earth dist.	-1499 Sep 28 j 00:48	22° $\mathring{\mu}$ 40'22	31.33967 AU	retrograde	-1490 Jan 26 j 11:25	12° $\mathring{\mu}$ 33'32	
retrograde	-1498 Jan 08 j 21:12	25° $\mathring{\mu}$ 08'36		opposition	-1490 Apr 15 j 09:44	11° $\mathring{\mu}$ 11'28	2°08'20
opposition	-1498 Mar 28 j 07:58	23° $\mathring{\mu}$ 46'44	2°07'36	min. Earth dist.	-1490 Apr 16 j 00:45	11° $\mathring{\mu}$ 10'27	29.33358 AU
min. Earth dist.	-1498 Mar 29 j 01:59	23° $\mathring{\mu}$ 45'31	29.34192 AU	direct	-1490 Jul 05 j 12:22	9° $\mathring{\mu}$ 47'26	
direct	-1498 Jun 17 j 18:10	22° $\mathring{\mu}$ 22'14					
max. Earth dist.	-1498 Sep 30 j 10:20	24° $\mathring{\mu}$ 50'29	31.34141 AU	conjunction	-1490 Oct 18 j 08:15	12° $\mathring{\mu}$ 16'51	1°59'50
				minimum elong	-1490 Oct 18 j 08:15	12° $\mathring{\mu}$ 16'51	1°59'50
conjunction	-1498 Oct 01 j 05:25	24° $\mathring{\mu}$ 52'16	1°59'50	max. Earth dist.	-1490 Oct 17 j 18:01	12° $\mathring{\mu}$ 15'30	31.32921 AU
minimum elong	-1498 Oct 01 j 05:25	24° $\mathring{\mu}$ 52'16	1°59'51	retrograde	-1489 Jan 28 j 20:39	14° $\mathring{\mu}$ 44'07	
retrograde	-1497 Jan 11 j 07:20	27° $\mathring{\mu}$ 18'48		opposition	-1489 Apr 17 j 22:09	13° $\mathring{\mu}$ 21'58	2°07'37
opposition	-1497 Mar 30 j 19:59	25° $\mathring{\mu}$ 56'57	2°08'20	min. Earth dist.	-1489 Apr 18 j 11:36	13° $\mathring{\mu}$ 21'04	29.32747 AU
min. Earth dist.	-1497 Mar 31 j 13:49	25° $\mathring{\mu}$ 55'44	29.34393 AU	direct	-1489 Jul 08 j 01:41	11° $\mathring{\mu}$ 57'56	
direct	-1497 Jun 20 j 04:23	24° $\mathring{\mu}$ 32'32					

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Attention, astronomical year style is used: The year -1489 in astronomical counting style is the year 1490 BCE in historical counting style.

conjunction	-1489 Oct 20 j 17:12	14° 2 27'13	1°59'04	conjunction	-1481 Nov 06 j 17:35	1° 1 50'59	1°46'53
minimum elong	-1489 Oct 20 j 17:12	14° 2 27'13	1°59'02	minimum elong	-1481 Nov 06 j 17:35	1° 1 50'59	1°46'52
max. Earth dist.	-1489 Oct 20 j 03:09	14° 2 25'54	31.32308 AU	max. Earth dist.	-1481 Nov 06 j 11:20	1° 1 50'24	31.28669 AU
retrograde	-1488 Jan 31 j 07:13	16° 2 54'34		retrograde	-1480 Feb 17 j 22:53	4° 1 19'26	
opposition	-1488 Apr 19 j 10:40	15° 2 32'19	2°06'42	opposition	-1480 May 07 j 15:44	2° 1 56'52	1°53'00
min. Earth dist.	-1488 Apr 19 j 23:39	15° 2 31'27	29.32156 AU	min. Earth dist.	-1480 May 07 j 21:28	2° 1 56'29	29.28418 AU
direct	-1488 Jul 09 j 13:15	14° 2 08'18		direct	-1480 Jul 27 j 07:59	1° 1 33'20	
conjunction	-1488 Oct 22 j 02:20	16° 2 37'28	1°58'07	conjunction	-1480 Nov 08 j 02:47	4° 1 01'59	1°44'39
minimum elong	-1488 Oct 22 j 02:21	16° 2 37'28	1°58'07	minimum elong	-1480 Nov 08 j 02:47	4° 1 01'59	1°44'38
max. Earth dist.	-1488 Oct 21 j 14:14	16° 2 36'20	31.31740 AU	max. Earth dist.	-1480 Nov 07 j 20:14	4° 1 01'22	31.27927 AU
retrograde	-1487 Feb 01 j 16:19	19° 2 04'54		retrograde	-1479 Feb 19 j 10:46	6° 1 30'35	
opposition	-1487 Apr 21 j 22:57	17° 2 42'35	2°05'37	opposition	-1479 May 10 j 04:32	5° 1 07'57	1°50'32
min. Earth dist.	-1487 Apr 22 j 10:52	17° 2 41'47	29.31614 AU	min. Earth dist.	-1479 May 10 j 10:10	5° 1 07'34	29.27607 AU
direct	-1487 Jul 12 j 02:01	16° 2 18'35		direct	-1479 Jul 29 j 19:33	3° 1 44'27	
conjunction	-1487 Oct 24 j 11:18	18° 2 47'40	1°57'01	conjunction	-1479 Nov 10 j 12:05	6° 1 13'02	1°42'15
minimum elong	-1487 Oct 24 j 11:18	18° 2 47'40	1°57'00	minimum elong	-1479 Nov 10 j 12:06	6° 1 13'02	1°42'14
max. Earth dist.	-1487 Oct 23 j 23:10	18° 2 46'31	31.31247 AU	max. Earth dist.	-1479 Nov 10 j 07:10	6° 1 12'34	31.27050 AU
retrograde	-1486 Feb 04 j 03:19	21° 2 15'13		retrograde	-1478 Feb 21 j 20:53	8° 1 41'45	
opposition	-1486 Apr 24 j 11:25	19° 2 52'50	2°04'21	opposition	-1478 May 12 j 17:29	7° 1 19'02	1°47'54
min. Earth dist.	-1486 Apr 24 j 22:01	19° 2 52'07	29.31164 AU	min. Earth dist.	-1478 May 12 j 22:19	7° 1 18'42	29.26655 AU
direct	-1486 Jul 14 j 12:15	18° 2 28'54		direct	-1478 Aug 01 j 08:51	5° 1 55'33	
conjunction	-1486 Oct 26 j 20:20	20° 2 57'53	1°55'44	conjunction	-1478 Nov 12 j 21:02	8° 1 24'01	1°39'43
minimum elong	-1486 Oct 26 j 20:20	20° 2 57'53	1°55'44	minimum elong	-1478 Nov 12 j 21:03	8° 1 24'01	1°39'43
max. Earth dist.	-1486 Oct 26 j 10:16	20° 2 56'56	31.30832 AU	max. Earth dist.	-1478 Nov 12 j 15:56	8° 1 23'32	31.26065 AU
retrograde	-1485 Feb 06 j 12:30	23° 2 25'34		retrograde	-1477 Feb 24 j 08:06	10° 1 52'52	
opposition	-1485 Apr 27 j 00:02	22° 2 03'09	2°02'53	opposition	-1477 May 15 j 06:26	9° 1 30'03	1°45'07
min. Earth dist.	-1485 Apr 27 j 10:11	22° 2 02'28	29.30773 AU	min. Earth dist.	-1477 May 15 j 10:11	9° 1 29'48	29.25638 AU
direct	-1485 Jul 16 j 23:33	20° 2 39'17		direct	-1477 Aug 03 j 19:39	8° 1 06'35	
conjunction	-1485 Oct 29 j 05:15	23° 2 08'12	1°54'18	conjunction	-1477 Nov 15 j 06:11	10° 1 34'57	1°37'03
minimum elong	-1485 Oct 29 j 05:15	23° 2 08'12	1°54'17	minimum elong	-1477 Nov 15 j 06:12	10° 1 34'57	1°37'01
max. Earth dist.	-1485 Oct 28 j 19:17	23° 2 07'16	31.30478 AU	max. Earth dist.	-1477 Nov 15 j 03:01	10° 1 34'39	31.25032 AU
retrograde	-1484 Feb 09 j 00:36	25° 2 36'02		retrograde	-1476 Feb 26 j 17:03	13° 1 03'56	
opposition	-1484 Apr 28 j 12:31	24° 2 13'36	2°01'16	opposition	-1476 May 16 j 19:19	11° 1 41'00	1°42'11
min. Earth dist.	-1484 Apr 28 j 20:52	24° 2 13'02	29.30428 AU	min. Earth dist.	-1476 May 16 j 22:37	11° 1 40'47	29.24605 AU
direct	-1484 Jul 18 j 09:15	22° 2 49'47		direct	-1476 Aug 05 j 07:25	10° 1 17'32	
conjunction	-1484 Oct 30 j 14:16	25° 2 18'40	1°52'41	conjunction	-1476 Nov 16 j 15:08	12° 1 45'49	1°34'14
minimum elong	-1484 Oct 30 j 14:16	25° 2 18'40	1°52'41	minimum elong	-1476 Nov 16 j 15:08	12° 1 45'49	1°34'13
max. Earth dist.	-1484 Oct 30 j 05:46	25° 2 17'51	31.30128 AU	max. Earth dist.	-1476 Nov 16 j 12:15	12° 1 45'32	31.24031 AU
retrograde	-1483 Feb 10 j 11:26	27° 2 46'39			-1475 Jan 29 j 04:41	15° 1	
opposition	-1483 May 01 j 01:16	26° 2 24'11	1°59'27	retrograde	-1475 Feb 28 j 05:01	15° 1 14'55	
min. Earth dist.	-1483 May 01 j 09:52	26° 2 23'36	29.30059 AU		-1475 Mar 31 j 02:06	15° 1	
direct	-1483 Jul 20 j 20:08	25° 2 00'28		opposition	-1475 May 19 j 08:06	13° 1 51'54	1°39'07
				min. Earth dist.	-1475 May 19 j 09:22	13° 1 51'49	29.23634 AU
conjunction	-1483 Nov 01 j 23:18	27° 2 29'17	1°50'55	direct	-1475 Aug 07 j 17:30	12° 1 28'27	
minimum elong	-1483 Nov 01 j 23:18	27° 2 29'17	1°50'53				
max. Earth dist.	-1483 Nov 01 j 15:21	27° 2 28'32	31.29741 AU	conjunction	-1475 Nov 19 j 00:09	14° 1 56'39	1°31'17
retrograde	-1482 Feb 12 j 23:59	29° 2 57'25		minimum elong	-1475 Nov 19 j 00:10	14° 1 56'39	1°31'15
opposition	-1482 May 03 j 13:53	28° 2 34'56	1°57'28	max. Earth dist.	-1475 Nov 18 j 22:51	14° 1 56'31	31.23098 AU
min. Earth dist.	-1482 May 03 j 20:46	28° 2 34'28	29.29624 AU		-1475 Nov 20 j 11:36	15° 1	
direct	-1482 Jul 23 j 08:15	27° 2 11'18		retrograde	-1474 Mar 02 j 15:34	17° 1 25'54	
				opposition	-1474 May 21 j 21:02	16° 1 02'49	1°35'54
conjunction	-1482 Nov 04 j 08:26	29° 2 40'04	1°48'59	min. Earth dist.	-1474 May 21 j 22:06	16° 1 02'44	29.22752 AU
minimum elong	-1482 Nov 04 j 08:27	29° 2 40'04	1°48'58		-1474 Jul 04 j 16:28	15° 1	
max. Earth dist.	-1482 Nov 04 j 01:03	29° 2 39'22	31.29259 AU	direct	-1474 Aug 10 j 04:22	14° 1 39'23	
	-1482 Nov 13 j 03:55	0° 1			-1474 Sep 14 j 14:41	15° 1	
retrograde	-1481 Feb 15 j 12:18	2° 1 08'22					
opposition	-1481 May 06 j 02:52	0° 1 45'51	1°55'19	conjunction	-1474 Nov 21 j 09:13	17° 1 07'31	1°28'12
min. Earth dist.	-1481 May 06 j 10:02	0° 1 45'22	29.29092 AU	minimum elong	-1474 Nov 21 j 09:13	17° 1 07'31	1°28'11
	-1481 Jun 05 j 02:46	30° 1		max. Earth dist.	-1474 Nov 21 j 09:03	17° 1 07'30	31.22286 AU
direct	-1481 Jul 25 j 18:56	29° 2 22'16		retrograde	-1473 Mar 05 j 04:16	19° 1 36'56	
	-1481 Sep 12 j 08:42	0° 1		opposition	-1473 May 24 j 09:54	18° 1 13'47	1°32'32
				min. Earth dist.	-1473 May 24 j 08:43	18° 1 13'52	29.21981 AU

Attention, astronomical year style is used: The year -1473 in astronomical counting style is the year 1474 BCE in historical counting style.

direct	-1473 Aug 12 j 15:33	16°M50'24		opposition	-1465 Jun 11 j 18:40	5°Z46'23	1°01'06
				min. Earth dist.	-1465 Jun 11 j 12:06	5°Z46'50	29.15445 AU
conjunction	-1473 Nov 23 j 18:12	19°M18'29	1°24'59	direct	-1465 Aug 30 j 10:54	4°Z23'20	
minimum elong	-1473 Nov 23 j 18:12	19°M18'29	1°24'58				
max. Earth dist.	-1473 Nov 23 j 18:55	19°M18'33	31.21563 AU	conjunction	-1465 Dec 10 j 21:33	6°Z51'01	0°55'10
retrograde	-1472 Mar 06 j 16:47	21°M48'05		minimum elong	-1465 Dec 10 j 21:33	6°Z51'01	0°55'08
opposition	-1472 May 25 j 22:55	20°M24'53	1°29'02	max. Earth dist.	-1465 Dec 11 j 04:53	6°Z51'43	31.14831 AU
min. Earth dist.	-1472 May 25 j 21:37	20°M24'58	29.21298 AU	retrograde	-1464 Mar 24 j 15:16	9°Z21'53	
direct	-1472 Aug 14 j 00:55	19°M01'34		opposition	-1464 Jun 13 j 07:43	7°Z58'10	0°56'43
				min. Earth dist.	-1464 Jun 12 j 23:19	7°Z58'44	29.14261 AU
conjunction	-1472 Nov 25 j 03:25	21°M29'36	1°21'39	direct	-1464 Aug 31 j 22:14	6°Z35'06	
minimum elong	-1472 Nov 25 j 03:26	21°M29'36	1°21'38				
max. Earth dist.	-1472 Nov 25 j 05:46	21°M29'50	31.20915 AU	conjunction	-1464 Dec 12 j 07:07	9°Z02'44	0°51'01
retrograde	-1471 Mar 09 j 04:14	23°M59'21		minimum elong	-1464 Dec 12 j 07:07	9°Z02'44	0°51'00
opposition	-1471 May 28 j 11:41	22°M36'08	1°25'23	max. Earth dist.	-1464 Dec 12 j 14:57	9°Z03'29	31.13646 AU
min. Earth dist.	-1471 May 28 j 08:38	22°M36'20	29.20651 AU	retrograde	-1463 Mar 27 j 03:34	11°Z33'44	
direct	-1471 Aug 16 j 13:43	21°M12'53		opposition	-1463 Jun 15 j 20:46	10°Z09'55	0°52'14
				min. Earth dist.	-1463 Jun 15 j 12:25	10°Z10'29	29.13103 AU
conjunction	-1471 Nov 27 j 12:36	23°M40'53	1°18'11	direct	-1463 Sep 03 j 07:42	8°Z46'51	
minimum elong	-1471 Nov 27 j 12:36	23°M40'53	1°18'09				
max. Earth dist.	-1471 Nov 27 j 14:58	23°M41'07	31.20280 AU	conjunction	-1463 Dec 14 j 16:47	11°Z14'26	0°46'47
retrograde	-1470 Mar 11 j 17:53	26°M10'49		minimum elong	-1463 Dec 14 j 16:48	11°Z14'26	0°46'45
opposition	-1470 May 31 j 00:48	24°M47'33	1°21'38	max. Earth dist.	-1463 Dec 15 j 02:24	11°Z15'21	31.12527 AU
min. Earth dist.	-1470 May 30 j 21:19	24°M47'47	29.20014 AU	retrograde	-1462 Mar 29 j 15:42	13°Z45'35	
direct	-1470 Aug 19 j 00:51	23°M24'22		opposition	-1462 Jun 18 j 09:49	12°Z21'41	0°47'41
				min. Earth dist.	-1462 Jun 17 j 23:30	12°Z22'23	29.12020 AU
conjunction	-1470 Nov 29 j 21:53	25°M52'21	1°14'36	direct	-1462 Sep 05 j 20:29	10°Z58'37	
minimum elong	-1470 Nov 29 j 21:53	25°M52'21	1°14'36				
max. Earth dist.	-1470 Nov 30 j 02:12	25°M52'45	31.19625 AU	conjunction	-1462 Dec 17 j 02:16	13°Z26'11	0°42'30
retrograde	-1469 Mar 14 j 05:00	28°M22'27		minimum elong	-1462 Dec 17 j 02:16	13°Z26'11	0°42'29
opposition	-1469 Jun 02 j 13:57	26°M59'08	1°17'44	max. Earth dist.	-1462 Dec 17 j 12:01	13°Z27'06	31.11499 AU
min. Earth dist.	-1469 Jun 02 j 09:34	26°M59'26	29.19318 AU	retrograde	-1461 Apr 01 j 06:02	15°Z57'30	
direct	-1469 Aug 21 j 13:45	25°M36'01		opposition	-1461 Jun 20 j 23:00	14°Z33'32	0°43'03
				min. Earth dist.	-1461 Jun 20 j 12:04	14°Z34'16	29.11052 AU
conjunction	-1469 Dec 02 j 07:17	28°M03'57	1°10'55	direct	-1461 Sep 08 j 07:14	13°Z10'30	
minimum elong	-1469 Dec 02 j 07:17	28°M03'57	1°10'53				
max. Earth dist.	-1469 Dec 02 j 11:19	28°M04'20	31.18898 AU	conjunction	-1461 Dec 19 j 12:07	15°Z38'03	0°38'08
	-1468 Jan 29 j 14:27	0°Z		minimum elong	-1461 Dec 19 j 12:07	15°Z38'03	0°38'06
retrograde	-1468 Mar 15 j 17:22	0°Z34'14		max. Earth dist.	-1461 Dec 19 j 23:59	15°Z39'11	31.10582 AU
	-1468 May 02 j 16:54	30°RM		retrograde	-1460 Apr 02 j 17:40	18°Z09'33	
opposition	-1468 Jun 04 j 03:00	29°M10'52	1°13'44	opposition	-1460 Jun 22 j 11:55	16°Z45'32	0°38'21
min. Earth dist.	-1468 Jun 03 j 21:47	29°M11'13	29.18543 AU	min. Earth dist.	-1460 Jun 21 j 23:51	16°Z46'21	29.10176 AU
direct	-1468 Aug 23 j 00:21	27°M47'47		direct	-1460 Sep 09 j 19:32	15°Z22'33	
	-1468 Nov 26 j 19:18	0°Z					
conjunction	-1468 Dec 03 j 16:53	0°Z15'41	1°07'07	conjunction	-1460 Dec 20 j 21:50	17°Z50'06	0°33'43
minimum elong	-1468 Dec 03 j 16:53	0°Z15'41	1°07'06	minimum elong	-1460 Dec 20 j 21:51	17°Z50'06	0°33'42
max. Earth dist.	-1468 Dec 03 j 22:24	0°Z16'12	31.18056 AU	max. Earth dist.	-1460 Dec 21 j 09:42	17°Z51'14	31.09757 AU
retrograde	-1467 Mar 18 j 03:26	2°Z46'07		retrograde	-1459 Apr 05 j 06:59	20°Z21'47	
opposition	-1467 Jun 06 j 16:13	1°Z22'41	1°09'37	min. Earth dist.	-1459 Jun 24 j 11:51	18°Z58'38	29.09385 AU
min. Earth dist.	-1467 Jun 06 j 10:55	1°Z23'03	29.17627 AU	opposition	-1459 Jun 25 j 01:00	18°Z57'45	0°33'36
	-1467 Aug 20 j 20:02	30°RM		direct	-1459 Sep 12 j 06:03	17°Z34'49	
direct	-1467 Aug 25 j 12:47	29°M59'38					
	-1467 Aug 30 j 04:04	0°Z		conjunction	-1459 Dec 23 j 07:42	20°Z02'23	0°29'14
				minimum elong	-1459 Dec 23 j 07:42	20°Z02'23	0°29'12
conjunction	-1467 Dec 06 j 02:22	2°Z27'28	1°03'13	max. Earth dist.	-1459 Dec 23 j 21:21	20°Z03'40	31.08982 AU
minimum elong	-1467 Dec 06 j 02:22	2°Z27'28	1°03'11	retrograde	-1458 Apr 07 j 18:11	22°Z34'15	
max. Earth dist.	-1467 Dec 06 j 07:47	2°Z27'59	31.17086 AU	opposition	-1458 Jun 27 j 14:11	21°Z10'11	0°28'46
retrograde	-1466 Mar 20 j 16:17	4°Z58'04		min. Earth dist.	-1458 Jun 27 j 00:43	21°Z11'06	29.08621 AU
opposition	-1466 Jun 09 j 05:23	3°Z34'33	1°05'25	direct	-1458 Sep 14 j 18:31	19°Z47'19	
min. Earth dist.	-1466 Jun 08 j 22:32	3°Z35'01	29.16587 AU				
direct	-1466 Aug 27 j 23:50	2°Z11'30		conjunction	-1458 Dec 25 j 17:42	22°Z14'54	0°24'42
				minimum elong	-1458 Dec 25 j 17:42	22°Z14'54	0°24'41
conjunction	-1466 Dec 08 j 12:00	4°Z39'16	0°59'14	max. Earth dist.	-1458 Dec 26 j 07:32	22°Z16'12	31.08235 AU
minimum elong	-1466 Dec 08 j 12:00	4°Z39'16	0°59'13	retrograde	-1457 Apr 10 j 08:18	24°Z46'57	
max. Earth dist.	-1466 Dec 08 j 18:24	4°Z39'52	31.15989 AU	opposition	-1457 Jun 30 j 03:16	23°Z22'52	0°23'55
retrograde	-1465 Mar 23 j 02:53	7°Z10'00		min. Earth dist.	-1457 Jun 29 j 12:18	23°Z23'53	29.07864 AU
				direct	-1457 Sep 17 j 05:25	22°Z00'03	

Attention, astronomical year style is used: The year -1457 in astronomical counting style is the year 1458 BCE in historical counting style.

conjunction	-1457 Dec 28 j 03:53	24° \mathring{A} 27'38	0°20'08	retrograde	-1450 Apr 26 j 01:26	10° \mathring{C} 18'58	
minimum elong	-1457 Dec 28 j 03:53	24° \mathring{A} 27'38	0°20'06	opposition	-1450 Jul 15 j 22:58	8° \mathring{C} 54'19	0°-10'-46
max. Earth dist.	-1457 Dec 28 j 18:35	24° \mathring{A} 29'02	31.07445 AU	min. Earth dist.	-1450 Jul 15 j 04:46	8° \mathring{C} 55'34	29.00176 AU
retrograde	-1456 Apr 11 j 18:58	26° \mathring{A} 59'53		direct	-1450 Oct 02 j 11:29	7° \mathring{C} 31'23	
opposition	-1456 Jul 01 j 16:31	25° \mathring{A} 35'46	0°19'00				
min. Earth dist.	-1456 Jul 01 j 02:02	25° \mathring{A} 36'46	29.07040 AU	conjunction	-1449 Jan 12 j 05:35	9° \mathring{C} 58'53	0°-12'-23
direct	-1456 Sep 18 j 16:12	24° \mathring{A} 13'00		minimum elong	-1449 Jan 12 j 05:34	9° \mathring{C} 58'52	0°12'25
				behind sun begin	-1449 Jan 12 j 01:18	9° \mathring{C} 58'29	
conjunction	-1456 Dec 29 j 14:17	26° \mathring{A} 40'35	0°15'32	behind sun end	-1449 Jan 12 j 09:50	9° \mathring{C} 59'16	
minimum elong	-1456 Dec 29 j 14:17	26° \mathring{A} 40'35	0°15'31	max. Earth dist.	-1449 Jan 13 j 00:39	10° \mathring{C} 00'41	30.99588 AU
behind sun begin	-1456 Dec 29 j 12:21	26° \mathring{A} 40'25		retrograde	-1449 Apr 28 j 13:38	12° \mathring{C} 32'00	
behind sun end	-1456 Dec 29 j 16:12	26° \mathring{A} 40'46		opposition	-1449 Jul 18 j 11:52	11° \mathring{C} 07'16	0°-15'-43
max. Earth dist.	-1456 Dec 30 j 05:36	26° \mathring{A} 42'02	31.06578 AU	min. Earth dist.	-1449 Jul 17 j 17:22	11° \mathring{C} 08'32	28.99073 AU
retrograde	-1455 Apr 14 j 07:36	29° \mathring{A} 13'00		direct	-1449 Oct 05 j 00:21	9° \mathring{C} 44'18	
opposition	-1455 Jul 04 j 05:32	27° \mathring{A} 48'51	0°14'04				
min. Earth dist.	-1455 Jul 03 j 13:37	27° \mathring{A} 49'56	29.06111 AU	conjunction	-1448 Jan 14 j 16:18	12° \mathring{C} 11'48	0°-17'00
direct	-1455 Sep 21 j 03:07	26° \mathring{A} 26'05		minimum elong	-1448 Jan 14 j 16:18	12° \mathring{C} 11'48	0°17'03
				max. Earth dist.	-1448 Jan 15 j 11:35	12° \mathring{C} 13'37	30.98548 AU
conjunction	-1454 Jan 01 j 00:42	28° \mathring{A} 53'41	0°10'55	retrograde	-1448 Apr 30 j 03:40	14° \mathring{C} 45'02	
minimum elong	-1454 Jan 01 j 00:42	28° \mathring{A} 53'41	0°10'53	min. Earth dist.	-1448 Jul 19 j 04:38	13° \mathring{C} 21'37	28.98092 AU
behind sun begin	-1455 Dec 31 j 19:47	28° \mathring{A} 53'14		opposition	-1448 Jul 20 j 00:41	13° \mathring{C} 20'15	0°-20'-39
behind sun end	-1454 Jan 01 j 05:37	28° \mathring{A} 54'08		direct	-1448 Oct 06 j 11:42	11° \mathring{C} 57'17	
max. Earth dist.	-1454 Jan 01 j 15:55	28° \mathring{A} 55'07	31.05583 AU				
	-1454 Jan 31 j 03:03	0° \mathring{C}		conjunction	-1447 Jan 16 j 03:06	14° \mathring{C} 24'47	0°-21'-35
retrograde	-1454 Apr 16 j 20:26	1° \mathring{C} 26'15		minimum elong	-1447 Jan 16 j 03:06	14° \mathring{C} 24'47	0°21'37
opposition	-1454 Jul 06 j 18:52	0° \mathring{C} 02'01	0°09'06	max. Earth dist.	-1447 Jan 16 j 23:18	14° \mathring{C} 26'42	30.97610 AU
min. Earth dist.	-1454 Jul 06 j 03:33	0° \mathring{C} 03'04	29.05058 AU	retrograde	-1447 May 02 j 14:39	16° \mathring{C} 58'11	
	-1454 Jul 08 j 00:31	30° \mathring{R} \mathring{A}		opposition	-1447 Jul 22 j 13:33	15° \mathring{C} 33'20	0°-25'-34
direct	-1454 Sep 23 j 12:19	28° \mathring{A} 39'15		min. Earth dist.	-1447 Jul 21 j 17:45	15° \mathring{C} 34'42	28.97214 AU
	-1454 Dec 04 j 01:26	0° \mathring{C}		direct	-1447 Oct 08 j 22:40	14° \mathring{C} 10'23	
conjunction	-1453 Jan 03 j 11:15	1° \mathring{C} 06'50	0°06'18	conjunction	-1446 Jan 18 j 14:04	16° \mathring{C} 37'56	0°-26'-10
minimum elong	-1453 Jan 03 j 11:15	1° \mathring{C} 06'50	0°06'17	minimum elong	-1446 Jan 18 j 14:04	16° \mathring{C} 37'56	0°26'13
behind sun begin	-1453 Jan 03 j 05:11	1° \mathring{C} 06'17		max. Earth dist.	-1446 Jan 19 j 11:15	16° \mathring{C} 39'56	30.96790 AU
behind sun end	-1453 Jan 03 j 17:20	1° \mathring{C} 07'23		retrograde	-1446 May 05 j 03:54	19° \mathring{C} 11'27	
max. Earth dist.	-1453 Jan 04 j 03:41	1° \mathring{C} 08'23	31.04471 AU	min. Earth dist.	-1446 Jul 24 j 04:56	17° \mathring{C} 48'04	28.96434 AU
retrograde	-1453 Apr 19 j 09:10	3° \mathring{C} 39'31		opposition	-1446 Jul 25 j 02:21	17° \mathring{C} 46'36	0°-30'-26
opposition	-1453 Jul 09 j 07:59	2° \mathring{C} 15'12	0°04'08	direct	-1446 Oct 11 j 09:47	16° \mathring{C} 23'40	
min. Earth dist.	-1453 Jul 08 j 15:24	2° \mathring{C} 16'20	29.03879 AU				
direct	-1453 Sep 26 j 01:28	0° \mathring{C} 52'24		conjunction	-1445 Jan 21 j 01:01	18° \mathring{C} 51'15	0°-30'-42
				minimum elong	-1445 Jan 21 j 01:01	18° \mathring{C} 51'15	0°30'44
conjunction	-1452 Jan 05 j 21:45	3° \mathring{C} 19'57	0°01'38	max. Earth dist.	-1445 Jan 21 j 22:19	18° \mathring{C} 53'16	30.96035 AU
minimum elong	-1452 Jan 05 j 21:46	3° \mathring{C} 19'57	0°01'36	retrograde	-1445 May 07 j 16:46	21° \mathring{C} 24'57	
behind sun begin	-1452 Jan 05 j 15:21	3° \mathring{C} 19'22		opposition	-1445 Jul 27 j 15:19	20° \mathring{C} 00'04	0°-35'-16
behind sun end	-1452 Jan 06 j 04:11	3° \mathring{C} 20'32		min. Earth dist.	-1445 Jul 26 j 18:30	20° \mathring{C} 01'30	28.95708 AU
max. Earth dist.	-1452 Jan 06 j 13:39	3° \mathring{C} 21'27	31.03251 AU	direct	-1445 Oct 13 j 18:57	18° \mathring{C} 37'09	
retrograde	-1452 Apr 20 j 23:35	5° \mathring{C} 52'45					
desc. node	-1452 May 09 j 18:47	5° \mathring{C} 47'07		conjunction	-1444 Jan 23 j 12:24	21° \mathring{C} 04'48	0°-35'-12
opposition	-1452 Jul 10 j 20:59	4° \mathring{C} 28'19	0°00'-49	minimum elong	-1444 Jan 23 j 12:24	21° \mathring{C} 04'48	0°35'15
min. Earth dist.	-1452 Jul 10 j 04:30	4° \mathring{C} 29'27	29.02636 AU	max. Earth dist.	-1444 Jan 24 j 10:56	21° \mathring{C} 06'56	30.95316 AU
direct	-1452 Sep 27 j 11:48	3° \mathring{C} 05'28		retrograde	-1444 May 09 j 05:37	23° \mathring{C} 38'38	
				min. Earth dist.	-1444 Jul 28 j 06:01	22° \mathring{C} 15'16	28.94982 AU
conjunction	-1451 Jan 07 j 08:27	5° \mathring{C} 33'00	0°-3'-8	opposition	-1444 Jul 29 j 03:56	22° \mathring{C} 13'45	0°-40'-3
minimum elong	-1451 Jan 07 j 08:26	5° \mathring{C} 33'00	0°03'09	direct	-1444 Oct 15 j 07:05	20° \mathring{C} 50'52	
behind sun begin	-1451 Jan 07 j 02:03	5° \mathring{C} 32'25					
behind sun end	-1451 Jan 07 j 14:50	5° \mathring{C} 33'35		conjunction	-1443 Jan 24 j 23:45	23° \mathring{C} 18'35	0°-39'-39
max. Earth dist.	-1451 Jan 08 j 02:01	5° \mathring{C} 34'39	31.01988 AU	minimum elong	-1443 Jan 24 j 23:45	23° \mathring{C} 18'35	0°39'40
retrograde	-1451 Apr 23 j 11:13	8° \mathring{C} 05'54		max. Earth dist.	-1443 Jan 25 j 21:29	23° \mathring{C} 20'38	30.94568 AU
opposition	-1451 Jul 13 j 09:57	6° \mathring{C} 41'22	0°-5'-48	retrograde	-1443 May 11 j 20:12	25° \mathring{C} 52'34	
min. Earth dist.	-1451 Jul 12 j 16:38	6° \mathring{C} 42'33	29.01372 AU	opposition	-1443 Jul 31 j 16:52	24° \mathring{C} 27'40	0°-44'-47
direct	-1451 Sep 30 j 00:12	5° \mathring{C} 18'28		min. Earth dist.	-1443 Jul 30 j 19:21	24° \mathring{C} 29'08	28.94216 AU
				direct	-1443 Oct 17 j 16:36	23° \mathring{C} 04'47	
conjunction	-1450 Jan 09 j 18:50	7° \mathring{C} 45'57	0°-7'-45	conjunction	-1442 Jan 27 j 11:17	25° \mathring{C} 32'34	0°-44'-2
minimum elong	-1450 Jan 09 j 18:50	7° \mathring{C} 45'57	0°07'49	minimum elong	-1442 Jan 27 j 11:17	25° \mathring{C} 32'34	0°44'05
behind sun begin	-1450 Jan 09 j 13:02	7° \mathring{C} 45'26		max. Earth dist.	-1442 Jan 28 j 10:19	25° \mathring{C} 34'44	30.93753 AU
behind sun end	-1450 Jan 10 j 00:38	7° \mathring{C} 46'29		retrograde	-1442 May 14 j 08:48	28° \mathring{C} 06'41	
max. Earth dist.	-1450 Jan 10 j 12:16	7° \mathring{C} 47'36	31.00749 AU				

Attention, astronomical year style is used: The year -1442 in astronomical counting style is the year 1443 BCE in historical counting style.

min. Earth dist.	-1442 Aug 02 j 07:49	26° $\overline{3}$ 43'15	28.93352 AU	max. Earth dist.	-1434 Feb 15 j 10:33	13° \approx 27'53	30.86647 AU
opposition	-1442 Aug 03 j 05:44	26° $\overline{3}$ 41'44	0°-49'-27		-1434 Mar 31 j 04:30	15° \approx	
direct	-1442 Oct 20 j 04:27	25° $\overline{3}$ 18'51		retrograde	-1434 Jun 01 j 18:45	16° \approx 00'19	
					-1434 Aug 06 j 04:19	15° \approx R \approx	
conjunction	-1441 Jan 29 j 22:57	27° $\overline{3}$ 46'40	0°-48'-22	min. Earth dist.	-1434 Aug 20 j 10:17	14° \approx 36'35	28.86501 AU
minimum elong	-1441 Jan 29 j 22:57	27° $\overline{3}$ 46'40	0°48'23	opposition	-1434 Aug 21 j 09:51	14° \approx 34'56	-1°-23'-31
max. Earth dist.	-1441 Jan 30 j 21:05	27° $\overline{3}$ 48'46	30.92843 AU	direct	-1434 Nov 06 j 23:13	13° \approx 11'45	
	-1441 Apr 10 j 21:30	0° \approx			-1433 Jan 30 j 03:29	15° \approx	
retrograde	-1441 May 17 j 00:10	0° \approx 20'54					
	-1441 Jun 22 j 20:18	30° \approx R $\overline{3}$		conjunction	-1433 Feb 16 j 22:35	15° \approx 39'55	-1°-19'-51
opposition	-1441 Aug 05 j 18:30	28° $\overline{3}$ 55'54	0°-54'-2	minimum elong	-1433 Feb 16 j 22:35	15° \approx 39'55	1°19'52
min. Earth dist.	-1441 Aug 04 j 20:32	28° $\overline{3}$ 57'25	28.92401 AU	max. Earth dist.	-1433 Feb 18 j 00:21	15° \approx 42'21	30.86206 AU
direct	-1441 Oct 22 j 15:44	27° $\overline{3}$ 32'59		retrograde	-1433 Jun 04 j 07:26	18° \approx 14'42	
				opposition	-1433 Aug 23 j 22:01	16° \approx 49'20	-1°-27'-17
conjunction	-1440 Feb 01 j 10:47	0° \approx 00'51	0°-52'-37	min. Earth dist.	-1433 Aug 22 j 22:02	16° \approx 51'01	28.86107 AU
minimum elong	-1440 Feb 01 j 10:47	0° \approx 00'51	0°52'40	direct	-1433 Nov 09 j 10:33	15° \approx 26'10	
	-1440 Feb 01 j 01:46	0° \approx					
max. Earth dist.	-1440 Feb 02 j 09:49	0° \approx 03'02	30.91835 AU	conjunction	-1432 Feb 19 j 11:00	17° \approx 54'24	-1°-23'-19
retrograde	-1440 May 18 j 13:23	2° \approx 35'09		minimum elong	-1432 Feb 19 j 11:00	17° \approx 54'24	1°23'21
min. Earth dist.	-1440 Aug 06 j 09:37	1° \approx 11'35	28.91360 AU	max. Earth dist.	-1432 Feb 20 j 11:54	17° \approx 56'45	30.85852 AU
opposition	-1440 Aug 07 j 07:14	1° \approx 10'05	0°-58'-32	retrograde	-1432 Jun 05 j 22:24	20° \approx 29'17	
	-1440 Sep 26 j 09:35	30° \approx R $\overline{3}$		min. Earth dist.	-1432 Aug 24 j 10:24	19° \approx 05'35	28.85784 AU
direct	-1440 Oct 24 j 04:54	29° $\overline{3}$ 47'07		opposition	-1432 Aug 25 j 10:21	19° \approx 03'55	-1°-30'-55
	-1440 Nov 20 j 10:33	0° \approx		direct	-1432 Nov 10 j 21:17	17° \approx 40'44	
conjunction	-1439 Feb 02 j 22:28	2° \approx 15'01	0°-56'-47	conjunction	-1431 Feb 20 j 23:35	20° \approx 09'04	-1°-26'-39
minimum elong	-1439 Feb 02 j 22:28	2° \approx 15'01	0°56'49	minimum elong	-1431 Feb 20 j 23:34	20° \approx 09'04	1°26'40
max. Earth dist.	-1439 Feb 03 j 21:10	2° \approx 17'09	30.90782 AU	max. Earth dist.	-1431 Feb 22 j 01:21	20° \approx 11'30	30.85521 AU
retrograde	-1439 May 21 j 03:34	4° \approx 49'23		retrograde	-1431 Jun 08 j 11:29	22° \approx 44'01	
opposition	-1439 Aug 09 j 19:48	3° \approx 24'15	-1°-2'-57	opposition	-1431 Aug 27 j 22:40	21° \approx 18'40	-1°-34'-25
min. Earth dist.	-1439 Aug 08 j 21:14	3° \approx 25'48	28.90309 AU	min. Earth dist.	-1431 Aug 26 j 23:18	21° \approx 20'18	28.85453 AU
direct	-1439 Oct 26 j 16:43	2° \approx 01'13		direct	-1431 Nov 13 j 09:29	19° \approx 55'30	
conjunction	-1438 Feb 05 j 10:17	4° \approx 29'08	-1°00'-53	conjunction	-1430 Feb 23 j 12:22	22° \approx 23'55	-1°-29'-51
minimum elong	-1438 Feb 05 j 10:16	4° \approx 29'08	1°00'56	minimum elong	-1430 Feb 23 j 12:22	22° \approx 23'55	1°29'54
max. Earth dist.	-1438 Feb 06 j 09:30	4° \approx 31'19	30.89734 AU	max. Earth dist.	-1430 Feb 24 j 13:19	22° \approx 26'16	30.85176 AU
retrograde	-1438 May 23 j 15:20	7° \approx 03'34		retrograde	-1430 Jun 11 j 02:39	24° \approx 58'55	
min. Earth dist.	-1438 Aug 11 j 10:25	5° \approx 39'52	28.89304 AU	min. Earth dist.	-1430 Aug 29 j 11:11	23° \approx 35'14	28.85084 AU
opposition	-1438 Aug 12 j 08:23	5° \approx 38'21	-1°-7'-17	opposition	-1430 Aug 30 j 10:55	23° \approx 33'35	-1°-37'-46
direct	-1438 Oct 29 j 04:25	4° \approx 15'17		direct	-1430 Nov 15 j 20:56	22° \approx 10'22	
conjunction	-1437 Feb 07 j 22:09	6° \approx 43'12	-1°-4'-52	conjunction	-1429 Feb 26 j 01:21	24° \approx 38'53	-1°-32'-56
minimum elong	-1437 Feb 07 j 22:09	6° \approx 43'12	1°04'54	minimum elong	-1429 Feb 26 j 01:21	24° \approx 38'53	1°32'57
max. Earth dist.	-1437 Feb 08 j 22:03	6° \approx 45'28	30.88776 AU	max. Earth dist.	-1429 Feb 27 j 02:07	24° \approx 41'13	30.84749 AU
retrograde	-1437 May 26 j 05:30	9° \approx 17'42		retrograde	-1429 Jun 13 j 16:05	27° \approx 13'55	
opposition	-1437 Aug 14 j 20:46	7° \approx 52'25	-1°-11'-30	opposition	-1429 Sep 01 j 23:18	25° \approx 48'34	-1°-40'-59
min. Earth dist.	-1437 Aug 13 j 21:27	7° \approx 54'03	28.88400 AU	min. Earth dist.	-1429 Sep 01 j 00:48	25° \approx 50'08	28.84615 AU
direct	-1437 Oct 31 j 16:31	6° \approx 29'18		direct	-1429 Nov 18 j 09:08	24° \approx 25'19	
conjunction	-1436 Feb 10 j 10:08	8° \approx 57'17	-1°-8'-46	conjunction	-1428 Feb 28 j 14:30	26° \approx 53'53	-1°-35'-51
minimum elong	-1436 Feb 10 j 10:07	8° \approx 57'17	1°08'49	minimum elong	-1428 Feb 28 j 14:29	26° \approx 53'53	1°35'53
max. Earth dist.	-1436 Feb 11 j 09:52	8° \approx 59'32	30.87920 AU	max. Earth dist.	-1428 Feb 29 j 14:59	26° \approx 56'12	30.84236 AU
retrograde	-1436 May 27 j 17:24	11° \approx 31'51		retrograde	-1428 Jun 15 j 07:07	29° \approx 28'57	
min. Earth dist.	-1436 Aug 15 j 10:30	10° \approx 08'06	28.87626 AU	opposition	-1428 Sep 03 j 11:20	28° \approx 03'33	-1°-44'-2
opposition	-1436 Aug 16 j 09:06	10° \approx 06'31	-1°-15'-37	min. Earth dist.	-1428 Sep 02 j 12:16	28° \approx 05'10	28.84058 AU
direct	-1436 Nov 02 j 02:17	8° \approx 43'22		direct	-1428 Nov 19 j 22:02	26° \approx 40'16	
conjunction	-1435 Feb 11 j 22:15	11° \approx 11'23	-1°-12'-35	conjunction	-1427 Mar 02 j 03:32	29° \approx 08'53	-1°-38'-39
minimum elong	-1435 Feb 11 j 22:14	11° \approx 11'23	1°12'36	minimum elong	-1427 Mar 02 j 03:31	29° \approx 08'53	1°38'40
max. Earth dist.	-1435 Feb 12 j 23:14	11° \approx 13'45	30.87214 AU	max. Earth dist.	-1427 Mar 03 j 03:13	29° \approx 11'07	30.83642 AU
retrograde	-1435 May 30 j 05:18	13° \approx 46'02			-1427 Mar 25 j 03:32	0° \approx ✠	
opposition	-1435 Aug 18 j 21:23	12° \approx 20'40	-1°-19'-38	retrograde	-1427 Jun 17 j 19:20	1° \approx ✠43'57	
min. Earth dist.	-1435 Aug 17 j 21:31	12° \approx 22'20	28.86992 AU	opposition	-1427 Sep 05 j 23:33	0° \approx ✠18'31	-1°-46'-56
direct	-1435 Nov 04 j 14:18	10° \approx 57'30		min. Earth dist.	-1427 Sep 05 j 01:49	0° \approx ✠20'02	28.83455 AU
					-1427 Sep 17 j 01:35	30° \approx R \approx	
conjunction	-1434 Feb 14 j 10:11	13° \approx 25'35	-1°-16'-16	direct	-1427 Nov 22 j 08:45	28° \approx 55'10	
minimum elong	-1434 Feb 14 j 10:10	13° \approx 25'35	1°16'18		-1426 Jan 24 j 10:39	0° \approx ✠	

Attention, astronomical year style is used: The year -1426 in astronomical counting style is the year 1427 BCE in historical counting style.

conjunction	-1426 Mar 04 j 16:37	1° ✕ 23'49	-1°-41'-17	retrograde	-1418 Jul 08 j 19:43	21° ✕ 59'26	
minimum elong	-1426 Mar 04 j 16:36	1° ✕ 23'49	1°41'19	opposition	-1418 Sep 26 j 09:27	20° ✕ 34'07	-2°-5'-14
max. Earth dist.	-1426 Mar 05 j 16:57	1° ✕ 26'07	30.83036 AU	min. Earth dist.	-1418 Sep 25 j 14:12	20° ✕ 35'28	28.81722 AU
retrograde	-1426 Jun 20 j 07:52	3° ✕ 58'52		direct	-1418 Dec 12 j 16:07	19° ✕ 10'31	
opposition	-1426 Sep 08 j 11:31	2° ✕ 33'24	-1°-49'-40				
min. Earth dist.	-1426 Sep 07 j 13:09	2° ✕ 34'59	28.82858 AU	conjunction	-1417 Mar 25 j 18:17	21° ✕ 40'01	-1°-57'-38
direct	-1426 Nov 24 j 21:22	1° ✕ 10'00		minimum elong	-1417 Mar 25 j 18:17	21° ✕ 40'01	1°57'38
				max. Earth dist.	-1417 Mar 26 j 16:06	21° ✕ 42'04	30.81596 AU
conjunction	-1425 Mar 07 j 05:44	3° ✕ 38'42	-1°-43'-46	retrograde	-1417 Jul 11 j 09:48	24° ✕ 15'02	
minimum elong	-1425 Mar 07 j 05:44	3° ✕ 38'42	1°43'47	opposition	-1417 Sep 28 j 20:56	22° ✕ 49'45	-2°-6'-20
max. Earth dist.	-1425 Mar 08 j 04:54	3° ✕ 40'53	30.82460 AU	min. Earth dist.	-1417 Sep 28 j 01:38	22° ✕ 51'07	28.81735 AU
retrograde	-1425 Jun 22 j 21:00	6° ✕ 13'45		direct	-1417 Dec 15 j 05:05	21° ✕ 26'07	
opposition	-1425 Sep 10 j 23:23	4° ✕ 48'15	-1°-52'-15				
min. Earth dist.	-1425 Sep 10 j 01:51	4° ✕ 49'46	28.82331 AU	conjunction	-1416 Mar 27 j 08:22	23° ✕ 55'43	-1°-58'-35
direct	-1425 Nov 27 j 06:49	3° ✕ 24'46		minimum elong	-1416 Mar 27 j 08:22	23° ✕ 55'43	1°58'36
				max. Earth dist.	-1416 Mar 28 j 04:17	23° ✕ 57'35	30.81558 AU
conjunction	-1424 Mar 08 j 19:05	5° ✕ 53'34	-1°-46'-5	retrograde	-1416 Jul 12 j 23:42	26° ✕ 30'40	
minimum elong	-1424 Mar 08 j 19:05	5° ✕ 53'34	1°46'07	opposition	-1416 Sep 30 j 08:38	25° ✕ 05'23	-2°-7'-15
max. Earth dist.	-1424 Mar 09 j 19:15	5° ✕ 55'50	30.81971 AU	min. Earth dist.	-1416 Sep 29 j 14:45	25° ✕ 06'39	28.81656 AU
retrograde	-1424 Jun 24 j 08:58	8° ✕ 28'36		direct	-1416 Dec 16 j 15:27	23° ✕ 41'42	
opposition	-1424 Sep 12 j 11:12	7° ✕ 03'05	-1°-54'-39				
min. Earth dist.	-1424 Sep 11 j 13:23	7° ✕ 04'37	28.81899 AU	conjunction	-1415 Mar 29 j 22:28	26° ✕ 11'21	-1°-59'-21
direct	-1424 Nov 28 j 18:35	5° ✕ 39'33		minimum elong	-1415 Mar 29 j 22:28	26° ✕ 11'21	1°59'21
				max. Earth dist.	-1415 Mar 30 j 18:38	26° ✕ 13'15	30.81432 AU
conjunction	-1423 Mar 11 j 08:09	8° ✕ 08'25	-1°-48'-15	retrograde	-1415 Jul 15 j 10:56	28° ✕ 46'13	
minimum elong	-1423 Mar 11 j 08:09	8° ✕ 08'25	1°48'16	opposition	-1415 Oct 02 j 20:10	27° ✕ 20'56	-2°-7'-58
max. Earth dist.	-1423 Mar 12 j 07:16	8° ✕ 10'35	30.81605 AU	min. Earth dist.	-1415 Oct 02 j 02:36	27° ✕ 22'11	28.81488 AU
retrograde	-1423 Jun 26 j 22:39	10° ✕ 43'27		direct	-1415 Dec 19 j 04:15	25° ✕ 57'11	
opposition	-1423 Sep 14 j 23:02	9° ✕ 17'56	-1°-56'-52				
min. Earth dist.	-1423 Sep 14 j 01:17	9° ✕ 19'28	28.81612 AU	conjunction	-1414 Apr 01 j 12:33	28° ✕ 26'52	-1°-59'-55
direct	-1423 Dec 01 j 05:13	7° ✕ 54'22		minimum elong	-1414 Apr 01 j 12:33	28° ✕ 26'52	1°59'57
				max. Earth dist.	-1414 Apr 02 j 06:53	28° ✕ 28'36	30.81251 AU
conjunction	-1422 Mar 13 j 21:34	10° ✕ 23'20	-1°-50'-15		-1414 May 15 j 20:07	0° °	
minimum elong	-1422 Mar 13 j 21:34	10° ✕ 23'20	1°50'16	retrograde	-1414 Jul 17 j 23:35	1° ° 01'38	
max. Earth dist.	-1422 Mar 14 j 21:34	10° ✕ 25'35	30.81378 AU		-1414 Sep 21 j 04:56	30° ° 16'38	
retrograde	-1422 Jun 29 j 10:55	12° ✕ 58'22		opposition	-1414 Oct 05 j 07:32	29° ✕ 36'21	-2°-8'-29
opposition	-1422 Sep 17 j 10:46	11° ✕ 32'52	-1°-58'-55	min. Earth dist.	-1414 Oct 04 j 14:44	29° ✕ 37'32	28.81301 AU
min. Earth dist.	-1422 Sep 16 j 13:30	11° ✕ 34'22	28.81458 AU	direct	-1414 Dec 21 j 15:00	28° ✕ 12'29	
direct	-1422 Dec 03 j 16:53	10° ✕ 09'17			-1413 Mar 16 j 02:31	0° °	
conjunction	-1421 Mar 16 j 11:02	12° ✕ 38'21	-1°-52'-4	conjunction	-1413 Apr 04 j 02:50	0° ° 42'14	-2°00'-19
minimum elong	-1421 Mar 16 j 11:01	12° ✕ 38'21	1°52'05	minimum elong	-1413 Apr 04 j 02:50	0° ° 42'14	2°00'21
max. Earth dist.	-1421 Mar 17 j 10:10	12° ✕ 40'31	30.81300 AU	max. Earth dist.	-1413 Apr 04 j 21:31	0° ° 43'59	30.81060 AU
retrograde	-1421 Jul 02 j 01:52	15° ✕ 13'24		retrograde	-1413 Jul 20 j 10:59	3° ° 16'53	
opposition	-1421 Sep 19 j 22:27	13° ✕ 47'56	-2°00'-46	opposition	-1413 Oct 07 j 18:51	1° ° 51'34	-2°-8'-49
min. Earth dist.	-1421 Sep 19 j 00:44	13° ✕ 49'28	28.81442 AU	min. Earth dist.	-1413 Oct 07 j 03:01	1° ° 52'42	28.81124 AU
direct	-1421 Dec 06 j 03:55	12° ✕ 24'20		direct	-1413 Dec 24 j 02:36	0° ° 27'37	
conjunction	-1420 Mar 18 j 00:37	14° ✕ 53'31	-1°-53'-44	conjunction	-1412 Apr 05 j 16:53	2° ° 57'25	-2°00'-32
minimum elong	-1420 Mar 18 j 00:36	14° ✕ 53'31	1°53'45	minimum elong	-1412 Apr 05 j 16:53	2° ° 57'25	2°00'33
max. Earth dist.	-1420 Mar 18 j 23:48	14° ✕ 55'42	30.81321 AU	max. Earth dist.	-1412 Apr 06 j 10:13	2° ° 59'02	30.80920 AU
retrograde	-1420 Jul 03 j 15:24	17° ✕ 28'34		retrograde	-1412 Jul 22 j 00:24	5° ° 31'57	
opposition	-1420 Sep 21 j 10:06	16° ✕ 03'09	-2°-2'-27	opposition	-1412 Oct 09 j 05:59	4° ° 06'38	-2°-8'-57
min. Earth dist.	-1420 Sep 20 j 13:36	16° ✕ 04'36	28.81509 AU	min. Earth dist.	-1412 Oct 08 j 14:00	4° ° 07'46	28.81028 AU
direct	-1420 Dec 07 j 16:10	14° ✕ 39'34		direct	-1412 Dec 25 j 14:03	2° ° 42'36	
conjunction	-1419 Mar 20 j 14:21	17° ✕ 08'52	-1°-55'-13	conjunction	-1411 Apr 08 j 07:01	5° ° 12'27	-2°00'-35
minimum elong	-1419 Mar 20 j 14:21	17° ✕ 08'52	1°55'14	minimum elong	-1411 Apr 08 j 07:01	5° ° 12'27	2°00'35
max. Earth dist.	-1419 Mar 21 j 13:12	17° ✕ 11'01	30.81427 AU	max. Earth dist.	-1411 Apr 09 j 00:19	5° ° 14'04	30.80871 AU
retrograde	-1419 Jul 06 j 06:49	19° ✕ 43'55		retrograde	-1411 Jul 24 j 12:11	7° ° 46'53	
opposition	-1419 Sep 23 j 21:41	18° ✕ 18'33	-2°-3'-56	opposition	-1411 Oct 11 j 17:10	6° ° 21'33	-2°-8'-53
min. Earth dist.	-1419 Sep 23 j 00:42	18° ✕ 20'02	28.81627 AU	min. Earth dist.	-1411 Oct 11 j 02:25	6° ° 22'36	28.81047 AU
direct	-1419 Dec 10 j 05:13	16° ✕ 54'58		direct	-1411 Dec 28 j 02:27	4° ° 57'27	
conjunction	-1418 Mar 23 j 04:06	19° ✕ 24'23	-1°-56'-31	conjunction	-1410 Apr 10 j 21:06	7° ° 27'23	-2°00'-25
minimum elong	-1418 Mar 23 j 04:06	19° ✕ 24'23	1°56'32	minimum elong	-1410 Apr 10 j 21:07	7° ° 27'23	2°00'26
max. Earth dist.	-1418 Mar 24 j 02:01	19° ✕ 26'26	30.81534 AU	max. Earth dist.	-1410 Apr 11 j 13:50	7° ° 28'56	30.80970 AU

Attention, astronomical year style is used: The year -1410 in astronomical counting style is the year 1411 BCE in historical counting style.

retrograde	-1410 Jul 27 j 02:11	10° Υ 01'42		direct	-1401 Jan 17 j 12:22	25° Υ 12'47	
opposition	-1410 Oct 14 j 04:12	8° Υ 36'24	-2°-8'-37				
min. Earth dist.	-1410 Oct 13 j 12:53	8° Υ 37'29	28.81213 AU	conjunction	-1401 May 02 j 06:58	27° Υ 43'32	-1°-50'-52
direct	-1410 Dec 30 j 15:35	7° Υ 12'15		minimum elong	-1401 May 02 j 06:58	27° Υ 43'32	1°50'52
				max. Earth dist.	-1401 May 02 j 15:38	27° Υ 44'20	30.84914 AU
conjunction	-1409 Apr 13 j 11:19	9° Υ 42'15	-2°00'-5		-1401 Jul 15 j 23:12	0° \mathcal{B}	
minimum elong	-1409 Apr 13 j 11:19	9° Υ 42'15	2°00'05	retrograde	-1401 Aug 16 j 19:38	0° \mathcal{B} 16'52	
max. Earth dist.	-1409 Apr 14 j 03:17	9° Υ 43'45	30.81204 AU		-1401 Sep 18 j 00:30	30° $\mathcal{R}\Upsilon$	
retrograde	-1409 Jul 29 j 14:46	12° Υ 16'29		opposition	-1401 Nov 03 j 06:18	28° Υ 52'08	-1°-57'-31
opposition	-1409 Oct 16 j 15:14	10° Υ 51'14	-2°-8'-10	min. Earth dist.	-1401 Nov 02 j 22:18	28° Υ 52'42	28.85190 AU
min. Earth dist.	-1409 Oct 16 j 01:24	10° Υ 52'13	28.81527 AU	direct	-1400 Jan 20 j 01:24	27° Υ 27'41	
direct	-1408 Jan 02 j 02:33	9° Υ 27'03					
				conjunction	-1400 May 03 j 21:25	29° Υ 58'29	-1°-48'-56
conjunction	-1408 Apr 15 j 01:37	11° Υ 57'09	-1°-59'-34	minimum elong	-1400 May 03 j 21:25	29° Υ 58'29	1°48'56
minimum elong	-1408 Apr 15 j 01:37	11° Υ 57'09	1°59'35	max. Earth dist.	-1400 May 04 j 05:07	29° Υ 59'12	30.85255 AU
max. Earth dist.	-1408 Apr 15 j 17:42	11° Υ 58'39	30.81599 AU		-1400 May 04 j 13:39	0° \mathcal{B}	
retrograde	-1408 Jul 31 j 04:55	14° Υ 31'17		retrograde	-1400 Aug 18 j 07:24	2° \mathcal{B} 31'40	
min. Earth dist.	-1408 Oct 17 j 11:59	13° Υ 07'07	28.81976 AU	opposition	-1400 Nov 04 j 17:02	1° \mathcal{B} 06'56	-1°-55'-22
opposition	-1408 Oct 18 j 02:11	13° Υ 06'06	-2°-7'-30	min. Earth dist.	-1400 Nov 04 j 10:46	1° \mathcal{B} 07'23	28.85562 AU
direct	-1407 Jan 03 j 15:43	11° Υ 41'56			-1400 Dec 19 j 23:21	30° $\mathcal{R}\Upsilon$	
conjunction	-1407 Apr 17 j 15:40	14° Υ 12'08	-1°-58'-52				
minimum elong	-1407 Apr 17 j 15:40	14° Υ 12'08	1°58'52				
max. Earth dist.	-1407 Apr 18 j 06:18	14° Υ 13'30	30.82106 AU				
retrograde	-1407 Aug 02 j 18:32	16° Υ 46'12					
opposition	-1407 Oct 20 j 13:16	15° Υ 21'06	-2°-6'-39				
min. Earth dist.	-1407 Oct 20 j 00:22	15° Υ 22'01	28.82528 AU				
direct	-1406 Jan 06 j 02:16	13° Υ 56'55					
conjunction	-1406 Apr 20 j 06:11	16° Υ 27'15	-1°-57'-58				
minimum elong	-1406 Apr 20 j 06:12	16° Υ 27'15	1°57'59				
max. Earth dist.	-1406 Apr 20 j 21:02	16° Υ 28'38	30.82684 AU				
retrograde	-1406 Aug 05 j 06:20	19° Υ 01'14					
min. Earth dist.	-1406 Oct 22 j 11:41	17° Υ 37'07	28.83105 AU				
opposition	-1406 Oct 23 j 00:05	17° Υ 36'14	-2°-5'-35				
direct	-1405 Jan 08 j 14:48	16° Υ 12'03					
conjunction	-1405 Apr 22 j 20:41	18° Υ 42'30	-1°-56'-54				
minimum elong	-1405 Apr 22 j 20:41	18° Υ 42'30	1°56'54				
max. Earth dist.	-1405 Apr 23 j 09:20	18° Υ 43'41	30.83259 AU				
retrograde	-1405 Aug 07 j 19:32	21° Υ 16'24					
opposition	-1405 Oct 25 j 11:05	19° Υ 51'28	-2°-4'-21				
min. Earth dist.	-1405 Oct 24 j 23:41	19° Υ 52'17	28.83659 AU				
direct	-1404 Jan 11 j 01:15	18° Υ 27'16					
conjunction	-1404 Apr 24 j 11:18	20° Υ 57'49	-1°-55'-39				
minimum elong	-1404 Apr 24 j 11:18	20° Υ 57'49	1°55'39				
max. Earth dist.	-1404 Apr 24 j 23:56	20° Υ 59'00	30.83770 AU				
retrograde	-1404 Aug 09 j 07:02	23° Υ 31'37					
opposition	-1404 Oct 26 j 22:03	22° Υ 06'46	-2°-2'-55				
min. Earth dist.	-1404 Oct 26 j 12:00	22° Υ 07'29	28.84124 AU				
direct	-1403 Jan 12 j 12:25	20° Υ 42'32					
conjunction	-1403 Apr 27 j 01:48	23° Υ 13'09	-1°-54'-13				
minimum elong	-1403 Apr 27 j 01:48	23° Υ 13'09	1°54'14				
max. Earth dist.	-1403 Apr 27 j 12:23	23° Υ 14'08	30.84210 AU				
retrograde	-1403 Aug 11 j 19:47	25° Υ 46'49					
opposition	-1403 Oct 29 j 08:52	24° Υ 22'01	-2°-1'-18				
min. Earth dist.	-1403 Oct 28 j 23:10	24° Υ 22'42	28.84525 AU				
direct	-1402 Jan 14 j 23:46	22° Υ 57'43					
conjunction	-1402 Apr 29 j 16:24	25° Υ 28'24	-1°-52'-37				
minimum elong	-1402 Apr 29 j 16:24	25° Υ 28'24	1°52'38				
max. Earth dist.	-1402 Apr 30 j 02:26	25° Υ 29'21	30.84575 AU				
retrograde	-1402 Aug 14 j 06:34	28° Υ 01'55					
opposition	-1402 Oct 31 j 19:46	26° Υ 37'09	-1°-59'-30				
min. Earth dist.	-1402 Oct 31 j 11:50	26° Υ 37'43	28.84861 AU				

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Attention, astronomical year style is used: The year -1400 in astronomical counting style is the year 1401 BCE in historical counting style.

direct	-1400 Jan 20 j 01:24	27° Υ 27'41		minimum elong	-1393 May 21 j 01:45	15° Υ 39'55	1°31'01
				max. Earth dist.	-1393 May 21 j 04:23	15° Υ 40'09	30.90734 AU
conjunction	-1400 May 03 j 21:25	29° Υ 58'29	-1°-48'-56	retrograde	-1393 Sep 03 j 19:25	18° Υ 11'58	
minimum elong	-1400 May 03 j 21:25	29° Υ 58'29	1°48'56	opposition	-1393 Nov 20 j 18:17	16° Υ 47'46	-1°-35'-39
max. Earth dist.	-1400 May 04 j 05:07	29° Υ 59'12	30.85255 AU	min. Earth dist.	-1393 Nov 20 j 17:03	16° Υ 47'52	28.91335 AU
	-1400 May 04 j 13:39	0° Υ		direct	-1392 Feb 07 j 00:38	15° Υ 23'04	
retrograde	-1400 Aug 18 j 07:24	2° Υ 31'40					
opposition	-1400 Nov 04 j 17:02	1° Υ 06'56	-1°-55'-22	conjunction	-1392 May 22 j 16:09	17° Υ 54'23	-1°-27'-52
min. Earth dist.	-1400 Nov 04 j 10:46	1° Υ 07'23	28.85562 AU	minimum elong	-1392 May 22 j 16:09	17° Υ 54'23	1°27'52
	-1400 Dec 19 j 23:21	30° Υ		max. Earth dist.	-1392 May 22 j 17:07	17° Υ 54'28	30.91778 AU
direct	-1399 Jan 21 j 12:44	29° Υ 42'25		retrograde	-1392 Sep 05 j 08:21	20° Υ 26'17	
	-1399 Feb 22 j 21:00	0° Υ		opposition	-1392 Nov 22 j 04:44	19° Υ 02'11	-1°-32'-13
				min. Earth dist.	-1392 Nov 22 j 03:32	19° Υ 02'16	28.92336 AU
conjunction	-1399 May 06 j 11:42	2° Υ 13'16	-1°-46'-51	direct	-1391 Feb 08 j 12:44	17° Υ 37'28	
minimum elong	-1399 May 06 j 11:42	2° Υ 13'16	1°46'50				
max. Earth dist.	-1399 May 06 j 19:10	2° Υ 13'57	30.85674 AU	conjunction	-1391 May 25 j 06:27	20° Υ 08'50	-1°-24'-36
retrograde	-1399 Aug 20 j 20:49	4° Υ 46'15		minimum elong	-1391 May 25 j 06:27	20° Υ 08'50	1°24'36
opposition	-1399 Nov 07 j 03:33	3° Υ 21'34	-1°-53'-3	max. Earth dist.	-1391 May 25 j 06:13	20° Υ 08'49	30.92731 AU
min. Earth dist.	-1399 Nov 06 j 21:07	3° Υ 22'01	28.86017 AU	retrograde	-1391 Sep 07 j 19:13	22° Υ 40'34	
direct	-1398 Jan 24 j 03:03	1° Υ 56'59		opposition	-1391 Nov 24 j 15:19	21° Υ 16'33	-1°-28'-38
				min. Earth dist.	-1391 Nov 24 j 16:13	21° Υ 16'29	28.93241 AU
conjunction	-1398 May 09 j 02:02	4° Υ 27'52	-1°-44'-35	direct	-1390 Feb 11 j 00:08	19° Υ 51'47	
minimum elong	-1398 May 09 j 02:02	4° Υ 27'52	1°44'35				
max. Earth dist.	-1398 May 09 j 07:58	4° Υ 28'25	30.86189 AU	conjunction	-1390 May 27 j 20:54	22° Υ 23'13	-1°-21'-11
retrograde	-1398 Aug 23 j 09:19	7° Υ 00'42		minimum elong	-1390 May 27 j 20:55	22° Υ 23'13	1°21'11
opposition	-1398 Nov 09 j 14:02	5° Υ 36'02	-1°-50'-34	max. Earth dist.	-1390 May 27 j 19:43	22° Υ 23'06	30.93599 AU
min. Earth dist.	-1398 Nov 09 j 08:51	5° Υ 36'24	28.86604 AU	retrograde	-1390 Sep 10 j 07:42	24° Υ 54'45	
direct	-1397 Jan 26 j 14:47	4° Υ 11'23		opposition	-1390 Nov 27 j 01:37	23° Υ 30'48	-1°-24'-56
				min. Earth dist.	-1390 Nov 27 j 02:48	23° Υ 30'43	28.94049 AU
conjunction	-1397 May 11 j 16:30	6° Υ 42'20	-1°-42'-11	direct	-1389 Feb 13 j 14:28	22° Υ 06'00	
minimum elong	-1397 May 11 j 16:30	6° Υ 42'20	1°42'11				
max. Earth dist.	-1397 May 11 j 22:41	6° Υ 42'55	30.86849 AU	conjunction	-1389 May 30 j 11:14	24° Υ 37'28	-1°-17'-40
retrograde	-1397 Aug 25 j 20:54	9° Υ 14'59		minimum elong	-1389 May 30 j 11:14	24° Υ 37'28	1°17'41
opposition	-1397 Nov 12 j 00:32	7° Υ 50'24	-1°-47'-54	max. Earth dist.	-1389 May 30 j 08:10	24° Υ 37'10	30.94374 AU
min. Earth dist.	-1397 Nov 11 j 19:32	7° Υ 50'45	28.87326 AU	retrograde	-1389 Sep 12 j 19:39	27° Υ 08'49	
direct	-1396 Jan 29 j 03:45	6° Υ 25'43		opposition	-1389 Nov 29 j 12:04	25° Υ 44'54	-1°-21'-7
				min. Earth dist.	-1389 Nov 29 j 14:52	25° Υ 44'43	28.94801 AU
conjunction	-1396 May 13 j 06:36	8° Υ 56'43	-1°-39'-37	direct	-1388 Feb 16 j 02:29	24° Υ 20'03	
minimum elong	-1396 May 13 j 06:37	8° Υ 56'43	1°39'37				
max. Earth dist.	-1396 May 13 j 11:00	8° Υ 57'08	30.87657 AU	conjunction	-1388 Jun 01 j 01:22	26° Υ 51'32	-1°-14'-2
retrograde	-1396 Aug 27 j 10:09	11° Υ 29'13		minimum elong	-1388 Jun 01 j 01:23	26° Υ 51'32	1°14'02
opposition	-1396 Nov 13 j 11:01	10° Υ 04'42	-1°-45'-4	max. Earth dist.	-1388 May 31 j 22:11	26° Υ 51'15	30.95113 AU
min. Earth dist.	-1396 Nov 13 j 06:33	10° Υ 05'01	28.88209 AU	retrograde	-1388 Sep 14 j 07:01	29° Υ 22'41	
direct	-1395 Jan 30 j 14:44	8° Υ 40'00		opposition	-1388 Nov 30 j 22:21	27° Υ 58'50	-1°-17'-10
				min. Earth dist.	-1388 Dec 01 j 01:42	27° Υ 58'36	28.95520 AU
conjunction	-1395 May 15 j 20:59	11° Υ 11'05	-1°-36'-54	direct	-1387 Feb 17 j 15:57	26° Υ 33'55	
minimum elong	-1395 May 15 j 20:59	11° Υ 11'05	1°36'55				
max. Earth dist.	-1395 May 16 j 01:49	11° Υ 11'32	30.88609 AU	conjunction	-1387 Jun 03 j 15:23	29° Υ 05'26	-1°-10'-18
retrograde	-1395 Aug 29 j 21:01	13° Υ 43'25		minimum elong	-1387 Jun 03 j 15:23	29° Υ 05'26	1°10'18
opposition	-1395 Nov 15 j 21:25	12° Υ 19'01	-1°-42'-5	max. Earth dist.	-1387 Jun 03 j 10:07	29° Υ 04'57	30.95847 AU
min. Earth dist.	-1395 Nov 15 j 18:05	12° Υ 19'15	28.89207 AU		-1387 Jun 28 j 15:19	0° Υ	
direct	-1394 Feb 02 j 02:00	10° Υ 54'19		retrograde	-1387 Sep 16 j 19:58	1° Υ 36'23	
				opposition	-1387 Dec 03 j 08:31	0° Υ 12'35	-1°-13'-7
conjunction	-1394 May 18 j 11:16	13° Υ 25'28	-1°-34'-2	min. Earth dist.	-1387 Dec 03 j 12:38	0° Υ 12'18	28.96275 AU
minimum elong	-1394 May 18 j 11:17	13° Υ 25'28	1°34'02		-1387 Dec 10 j 18:52	30° Υ	
max. Earth dist.	-1394 May 18 j 14:15	13° Υ 25'45	30.89664 AU	direct	-1386 Feb 20 j 03:47	28° Υ 47'37	
	-1394 Jul 02 j 23:26	15° Υ			-1386 Apr 29 j 21:15	0° Υ	
retrograde	-1394 Sep 01 j 09:14	15° Υ 57'40					
	-1394 Nov 02 j 10:31	15° Υ		conjunction	-1386 Jun 06 j 05:30	1° Υ 19'10	-1°-6'-28
opposition	-1394 Nov 18 j 07:49	14° Υ 33'22	-1°-38'-57	minimum elong	-1386 Jun 06 j 05:31	1° Υ 19'10	1°06'27
min. Earth dist.	-1394 Nov 18 j 04:42	14° Υ 33'35	28.90279 AU	max. Earth dist.	-1386 Jun 06 j 00:31	1° Υ 18'42	30.96627 AU
direct	-1393 Feb 04 j 13:20	13° Υ 08'40		retrograde	-1386 Sep 19 j 06:07	3° Υ 49'55	
	-1393 May 02 j 23:48	15° Υ		opposition	-1386 Dec 05 j 18:47	2° Υ 26'11	-1°-8'-58
				min. Earth dist.	-1386 Dec 06 j 00:03	2° Υ 25'48	28.97083 AU
conjunction	-1393 May 21 j 01:45	15° Υ 39'55	-1°-31'-1	direct	-1385 Feb 22 j 16:02	1° Υ 01'10	

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Attention, astronomical year style is used: The year -1385 in astronomical counting style is the year 1386 BCE in historical counting style.

conjunction	-1385 Jun 08 j 19:18	3°II32'44	-1°-2'-32	retrograde	-1377 Oct 09 j 09:53	23°II49'30	
minimum elong	-1385 Jun 08 j 19:19	3°II32'44	1°02'31	opposition	-1377 Dec 25 j 14:55	22°II26'32	0°-27'-47
max. Earth dist.	-1385 Jun 08 j 12:34	3°II32'07	30.97489 AU	min. Earth dist.	-1377 Dec 26 j 03:32	22°II25'39	29.06756 AU
retrograde	-1385 Sep 21 j 17:28	6°II03'18		direct	-1376 Mar 14 j 04:57	21°II01'24	
opposition	-1385 Dec 08 j 04:55	4°II39'38	-1°-4'-43				
min. Earth dist.	-1385 Dec 08 j 10:05	4°II39'16	28.98000 AU	conjunction	-1376 Jun 28 j 22:08	23°II33'17	0°-23'-43
direct	-1384 Feb 25 j 03:43	3°II14'35		minimum elong	-1376 Jun 28 j 22:08	23°II33'17	0°23'42
				max. Earth dist.	-1376 Jun 28 j 06:56	23°II31'53	31.07148 AU
conjunction	-1384 Jun 10 j 09:11	5°II46'12	0°-58'-30	retrograde	-1376 Oct 10 j 21:25	26°II02'21	
minimum elong	-1384 Jun 10 j 09:11	5°II46'12	0°58'29	opposition	-1376 Dec 27 j 01:03	24°II39'26	0°-22'-56
max. Earth dist.	-1384 Jun 10 j 02:37	5°II45'36	30.98465 AU	min. Earth dist.	-1376 Dec 27 j 13:46	24°II38'32	29.07554 AU
retrograde	-1384 Sep 23 j 02:56	8°II16'36		direct	-1375 Mar 16 j 17:11	23°II14'14	
opposition	-1384 Dec 09 j 15:12	6°II53'01	-1°00'-21				
min. Earth dist.	-1384 Dec 09 j 21:44	6°II52'34	28.99040 AU	conjunction	-1375 Jul 01 j 11:23	25°II46'06	0°-19'-10
direct	-1383 Feb 26 j 14:31	5°II27'58		minimum elong	-1375 Jul 01 j 11:23	25°II46'06	0°19'10
				max. Earth dist.	-1375 Jun 30 j 20:14	25°II44'42	31.07919 AU
conjunction	-1383 Jun 12 j 22:48	7°II59'37	0°-54'-23	retrograde	-1375 Oct 13 j 06:44	28°II14'57	
minimum elong	-1383 Jun 12 j 22:48	7°II59'37	0°54'23	opposition	-1375 Dec 29 j 11:21	26°II52'04	0°-18'-3
max. Earth dist.	-1383 Jun 12 j 14:59	7°II58'54	30.99580 AU	min. Earth dist.	-1375 Dec 30 j 01:42	26°II51'03	29.08312 AU
retrograde	-1383 Sep 25 j 15:03	10°II29'52		direct	-1374 Mar 19 j 04:51	25°II26'48	
opposition	-1383 Dec 12 j 01:19	9°II06'24	0°-55'-55	max. Earth dist.	-1374 Jul 03 j 07:56	27°II57'07	31.08686 AU
min. Earth dist.	-1383 Dec 12 j 07:29	9°II05'57	29.00196 AU				
direct	-1382 Mar 01 j 01:36	7°II41'20		conjunction	-1374 Jul 04 j 00:26	27°II58'38	0°-14'-36
				minimum elong	-1374 Jul 04 j 00:26	27°II58'38	0°14'35
conjunction	-1382 Jun 15 j 12:37	10°II13'03	0°-50'-11	behind sun begin	-1374 Jul 03 j 21:49	27°II58'24	
minimum elong	-1382 Jun 15 j 12:37	10°II13'03	0°50'11	behind sun end	-1374 Jul 04 j 03:03	27°II58'52	
max. Earth dist.	-1382 Jun 15 j 04:10	10°II12'16	31.00778 AU		-1374 Sep 05 j 08:41	0°☾	
retrograde	-1382 Sep 28 j 00:43	12°II43'09		retrograde	-1374 Oct 15 j 17:39	0°☾27'18	
opposition	-1382 Dec 14 j 11:31	11°II19'48	0°-51'-23		-1374 Nov 25 j 18:13	30°RII	
min. Earth dist.	-1382 Dec 14 j 19:28	11°II19'14	29.01425 AU	opposition	-1374 Dec 31 j 21:22	29°II04'26	0°-13'-10
direct	-1381 Mar 03 j 12:35	9°II54'45		min. Earth dist.	-1373 Jan 01 j 11:20	29°II03'27	29.09090 AU
				direct	-1373 Mar 21 j 16:47	27°II39'07	
conjunction	-1381 Jun 18 j 02:24	12°II26'32	0°-45'-55		-1373 Jul 01 j 15:30	0°☾	
minimum elong	-1381 Jun 18 j 02:24	12°II26'32	0°45'55				
max. Earth dist.	-1381 Jun 17 j 17:18	12°II25'41	31.02029 AU	conjunction	-1373 Jul 06 j 13:24	0°☾10'56	0°-10'-1
retrograde	-1381 Sep 30 j 12:21	14°II56'29		minimum elong	-1373 Jul 06 j 13:24	0°☾10'56	0°10'01
opposition	-1381 Dec 16 j 21:44	13°II33'14	0°-46'-47	behind sun begin	-1373 Jul 06 j 08:09	0°☾10'28	
min. Earth dist.	-1381 Dec 17 j 05:47	13°II32'40	29.02660 AU	behind sun end	-1373 Jul 06 j 18:40	0°☾11'24	
direct	-1380 Mar 05 j 02:08	12°II08'12		max. Earth dist.	-1373 Jul 05 j 20:35	0°☾09'23	31.09486 AU
				retrograde	-1373 Oct 18 j 02:12	2°☾39'25	
conjunction	-1380 Jun 19 j 15:56	14°II40'03	0°-41'-35	opposition	-1372 Jan 03 j 07:41	1°☾16'35	0°-8'-15
minimum elong	-1380 Jun 19 j 15:56	14°II40'03	0°41'34	min. Earth dist.	-1372 Jan 03 j 23:01	1°☾15'30	29.09941 AU
max. Earth dist.	-1380 Jun 19 j 05:18	14°II39'04	31.03243 AU		-1372 Feb 28 j 20:43	30°RII	
retrograde	-1380 Oct 01 j 23:53	17°II09'52		direct	-1372 Mar 23 j 03:50	29°II51'14	
opposition	-1380 Dec 18 j 08:05	15°II46'42	0°-42'-7		-1372 Apr 15 j 09:33	0°☾	
min. Earth dist.	-1380 Dec 18 j 17:38	15°II46'02	29.03850 AU	max. Earth dist.	-1372 Jul 07 j 09:02	2°☾21'27	31.10391 AU
direct	-1379 Mar 07 j 13:26	14°II21'40					
				conjunction	-1372 Jul 08 j 02:04	2°☾23'01	0°-5'-27
conjunction	-1379 Jun 22 j 05:41	16°II53'33	0°-37'-11	minimum elong	-1372 Jul 08 j 02:03	2°☾23'01	0°05'26
minimum elong	-1379 Jun 22 j 05:41	16°II53'33	0°37'11	behind sun begin	-1372 Jul 07 j 19:43	2°☾22'27	
max. Earth dist.	-1379 Jun 21 j 18:45	16°II52'32	31.04385 AU	behind sun end	-1372 Jul 08 j 08:23	2°☾23'35	
retrograde	-1379 Oct 04 j 11:15	19°II23'11		retrograde	-1372 Oct 19 j 12:19	4°☾51'20	
opposition	-1379 Dec 20 j 18:17	18°II00'07	0°-37'-23	opposition	-1371 Jan 04 j 17:50	3°☾28'34	0°-3'-20
min. Earth dist.	-1379 Dec 21 j 04:36	17°II59'24	29.04928 AU	min. Earth dist.	-1371 Jan 05 j 08:45	3°☾27'31	29.10896 AU
direct	-1378 Mar 10 j 02:49	16°II35'04		direct	-1371 Mar 25 j 16:35	2°☾03'11	
conjunction	-1378 Jun 24 j 19:17	19°II06'58	0°-32'-44	conjunction	-1371 Jul 10 j 14:44	4°☾34'59	0°00'-48
minimum elong	-1378 Jun 24 j 19:17	19°II06'58	0°32'43	minimum elong	-1371 Jul 10 j 14:45	4°☾34'59	0°00'49
max. Earth dist.	-1378 Jun 24 j 06:03	19°II05'45	31.05410 AU	behind sun begin	-1371 Jul 10 j 08:11	4°☾34'24	
retrograde	-1378 Oct 07 j 00:19	21°II36'26		behind sun end	-1371 Jul 10 j 21:19	4°☾35'34	
opposition	-1378 Dec 23 j 04:35	20°II13'25	0°-32'-36	max. Earth dist.	-1371 Jul 09 j 20:50	4°☾33'20	31.11406 AU
min. Earth dist.	-1378 Dec 23 j 15:48	20°II12'38	29.05900 AU	asc. node	-1371 Sep 11 j 07:03	6°☾35'21	
direct	-1377 Mar 12 j 15:43	18°II48'20		retrograde	-1371 Oct 21 j 22:58	7°☾03'10	
				opposition	-1370 Jan 07 j 03:55	5°☾40'28	0°01'35
conjunction	-1377 Jun 27 j 08:52	21°II20'14	0°-28'-15	min. Earth dist.	-1370 Jan 07 j 19:44	5°☾39'22	29.11981 AU
minimum elong	-1377 Jun 27 j 08:52	21°II20'14	0°28'15	direct	-1370 Mar 28 j 02:55	4°☾15'06	
max. Earth dist.	-1377 Jun 26 j 19:40	21°II19'01	31.06322 AU	max. Earth dist.	-1370 Jul 12 j 09:58	6°☾45'18	31.12547 AU

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Attention, astronomical year style is used: The year -1370 in astronomical counting style is the year 1371 BCE in historical counting style.

conjunction	-1370 Jul	13 j 03:31	6° $\overline{46}$ '55	0°03'54	direct	-1362 Apr	15 j 03:59	21° $\overline{50}$ '55	
minimum elong	-1370 Jul	13 j 03:30	6° $\overline{46}$ '55	0°03'55	max. Earth dist.	-1362 Jul	30 j 06:36	24° $\overline{20}$ '32	31.20481 AU
behind sun begin	-1370 Jul	12 j 21:00	6° $\overline{46}$ '20						
behind sun end	-1370 Jul	13 j 09:59	6° $\overline{47}$ '29		conjunction	-1362 Jul	31 j 05:59	24° $\overline{22}$ '42	0°39'51
retrograde	-1370 Oct	24 j 09:33	9° $\overline{14}$ '58		minimum elong	-1362 Jul	31 j 05:59	24° $\overline{22}$ '42	0°39'53
opposition	-1369 Jan	09 j 14:09	7° $\overline{52}$ '22	0°06'30	retrograde	-1362 Nov	10 j 20:08	26° $\overline{49}$ '48	
min. Earth dist.	-1369 Jan	10 j 06:11	7° $\overline{51}$ '15	29.13155 AU	opposition	-1361 Jan	27 j 01:16	25° $\overline{27}$ '42	0°44'50
direct	-1369 Mar	30 j 15:57	6° $\overline{27}$ '02		min. Earth dist.	-1361 Jan	27 j 22:20	25° $\overline{26}$ '14	29.20870 AU
					direct	-1361 Apr	17 j 13:56	24° $\overline{02}$ '23	
conjunction	-1369 Jul	15 j 15:55	8° $\overline{58}$ '53	0°08'28					
minimum elong	-1369 Jul	15 j 15:55	8° $\overline{58}$ '53	0°08'29	conjunction	-1361 Aug	02 j 17:40	26° $\overline{34}$ '06	0°44'09
behind sun begin	-1369 Jul	15 j 10:11	8° $\overline{58}$ '23		minimum elong	-1361 Aug	02 j 17:40	26° $\overline{34}$ '06	0°44'10
behind sun end	-1369 Jul	15 j 21:39	8° $\overline{59}$ '23		max. Earth dist.	-1361 Aug	01 j 18:56	26° $\overline{31}$ '59	31.21179 AU
max. Earth dist.	-1369 Jul	14 j 20:52	8° $\overline{57}$ '08	31.13754 AU	retrograde	-1361 Nov	13 j 05:27	29° $\overline{01}$ '05	
retrograde	-1369 Oct	26 j 22:14	11° $\overline{26}$ '50		opposition	-1360 Jan	29 j 11:45	27° $\overline{38}$ '59	0°49'23
opposition	-1368 Jan	12 j 00:23	10° $\overline{04}$ '20	0°11'25	min. Earth dist.	-1360 Jan	30 j 08:52	27° $\overline{37}$ '31	29.21582 AU
min. Earth dist.	-1368 Jan	12 j 16:45	10° $\overline{03}$ '12	29.14387 AU	direct	-1360 Apr	19 j 03:30	26° $\overline{13}$ '38	
direct	-1368 Apr	01 j 04:05	8° $\overline{39}$ '03		max. Earth dist.	-1360 Aug	03 j 05:18	28° $\overline{43}$ '05	31.21923 AU
max. Earth dist.	-1368 Jul	16 j 10:00	11° $\overline{09}$ '13	31.14979 AU					
					conjunction	-1360 Aug	04 j 05:11	28° $\overline{45}$ '18	0°48'22
conjunction	-1368 Jul	17 j 04:32	11° $\overline{10}$ '56	0°13'03	minimum elong	-1360 Aug	04 j 05:11	28° $\overline{45}$ '18	0°48'24
minimum elong	-1368 Jul	17 j 04:31	11° $\overline{10}$ '56	0°13'05		-1360 Sep	08 j 06:08	0° $\overline{01}$ '	
behind sun begin	-1368 Jul	17 j 00:41	11° $\overline{10}$ '36		retrograde	-1360 Nov	14 j 17:08	1° $\overline{12}$ '09	
behind sun end	-1368 Jul	17 j 08:21	11° $\overline{11}$ '16			-1359 Jan	24 j 22:34	30° $\overline{08}$ '	
retrograde	-1368 Oct	28 j 07:53	13° $\overline{38}$ '47		opposition	-1359 Jan	30 j 22:06	29° $\overline{50}$ '04	0°53'51
opposition	-1367 Jan	13 j 10:42	12° $\overline{16}$ '23	0°16'18	min. Earth dist.	-1359 Jan	31 j 19:02	29° $\overline{48}$ '37	29.22386 AU
min. Earth dist.	-1367 Jan	14 j 04:18	12° $\overline{15}$ '09	29.15594 AU	direct	-1359 Apr	21 j 15:18	28° $\overline{24}$ '43	
direct	-1367 Apr	03 j 16:41	10° $\overline{51}$ '08			-1359 Jul	11 j 19:19	0° $\overline{01}$ '	
conjunction	-1367 Jul	19 j 16:55	13° $\overline{23}$ '02	0°17'36	conjunction	-1359 Aug	06 j 16:46	0° $\overline{56}$ '20	0°52'31
minimum elong	-1367 Jul	19 j 16:55	13° $\overline{23}$ '02	0°17'38	minimum elong	-1359 Aug	06 j 16:45	0° $\overline{56}$ '20	0°52'32
max. Earth dist.	-1367 Jul	18 j 20:38	13° $\overline{21}$ '10	31.16156 AU	max. Earth dist.	-1359 Aug	05 j 17:56	0° $\overline{54}$ '13	31.22767 AU
retrograde	-1367 Oct	30 j 19:51	15° $\overline{50}$ '47		retrograde	-1359 Nov	17 j 02:04	3° $\overline{23}$ '05	
opposition	-1366 Jan	15 j 21:02	14° $\overline{28}$ '29	0°21'10	opposition	-1358 Feb	02 j 08:42	2° $\overline{01}$ '02	0°58'15
min. Earth dist.	-1366 Jan	16 j 14:34	14° $\overline{27}$ '15	29.16730 AU	min. Earth dist.	-1358 Feb	03 j 06:15	1° $\overline{59}$ '32	29.23281 AU
direct	-1366 Apr	06 j 04:49	13° $\overline{03}$ '15		direct	-1358 Apr	24 j 03:34	0° $\overline{35}$ '42	
max. Earth dist.	-1366 Jul	21 j 09:17	15° $\overline{33}$ '19	31.17225 AU	max. Earth dist.	-1358 Aug	08 j 04:15	3° $\overline{05}$ '04	31.23719 AU
conjunction	-1366 Jul	22 j 05:28	15° $\overline{35}$ '10	0°22'09	conjunction	-1358 Aug	09 j 04:04	3° $\overline{07}$ '17	0°56'36
minimum elong	-1366 Jul	22 j 05:28	15° $\overline{35}$ '10	0°22'11	minimum elong	-1358 Aug	09 j 04:03	3° $\overline{07}$ '17	0°56'37
retrograde	-1366 Nov	02 j 05:39	18° $\overline{02}$ '48		retrograde	-1358 Nov	19 j 13:53	5° $\overline{23}$ '57	
opposition	-1365 Jan	18 j 07:32	16° $\overline{40}$ '34	0°26'00	opposition	-1357 Feb	04 j 19:12	4° $\overline{11}$ '57	1°02'33
min. Earth dist.	-1365 Jan	19 j 02:43	16° $\overline{39}$ '14	29.17747 AU	min. Earth dist.	-1357 Feb	05 j 15:56	4° $\overline{10}$ '31	29.24286 AU
direct	-1365 Apr	08 j 16:37	15° $\overline{15}$ '21		direct	-1357 Apr	26 j 15:58	2° $\overline{46}$ '39	
conjunction	-1365 Jul	24 j 17:47	17° $\overline{47}$ '16	0°26'39	conjunction	-1357 Aug	11 j 15:29	5° $\overline{18}$ '13	1°00'35
minimum elong	-1365 Jul	24 j 17:46	17° $\overline{47}$ '16	0°26'39	minimum elong	-1357 Aug	11 j 15:29	5° $\overline{18}$ '13	1°00'36
max. Earth dist.	-1365 Jul	23 j 20:12	17° $\overline{45}$ '16	31.18187 AU	max. Earth dist.	-1357 Aug	10 j 16:35	5° $\overline{16}$ '05	31.24756 AU
retrograde	-1365 Nov	04 j 16:38	20° $\overline{14}$ '46		retrograde	-1357 Nov	21 j 23:56	7° $\overline{44}$ '49	
opposition	-1364 Jan	20 j 17:58	18° $\overline{52}$ '35	0°30'47	opposition	-1356 Feb	07 j 05:56	6° $\overline{22}$ '53	1°06'46
min. Earth dist.	-1364 Jan	21 j 12:46	18° $\overline{51}$ '17	29.18651 AU	min. Earth dist.	-1356 Feb	08 j 03:42	6° $\overline{21}$ '23	29.25356 AU
direct	-1364 Apr	10 j 04:40	17° $\overline{27}$ '22		direct	-1356 Apr	28 j 04:04	4° $\overline{57}$ '39	
max. Earth dist.	-1364 Jul	25 j 07:54	19° $\overline{57}$ '12	31.19027 AU	max. Earth dist.	-1356 Aug	12 j 03:00	7° $\overline{27}$ '00	31.25837 AU
conjunction	-1364 Jul	26 j 05:55	19° $\overline{59}$ '15	0°31'06	conjunction	-1356 Aug	13 j 02:34	7° $\overline{29}$ '11	1°04'30
minimum elong	-1364 Jul	26 j 05:54	19° $\overline{59}$ '15	0°31'08	minimum elong	-1356 Aug	13 j 02:34	7° $\overline{29}$ '11	1°04'31
retrograde	-1364 Nov	06 j 00:44	22° $\overline{26}$ '37		retrograde	-1356 Nov	23 j 10:44	9° $\overline{55}$ '44	
opposition	-1363 Jan	22 j 04:30	21° $\overline{04}$ '29	0°35'32	opposition	-1355 Feb	08 j 16:33	8° $\overline{33}$ '53	1°10'54
min. Earth dist.	-1363 Jan	23 j 00:52	21° $\overline{03}$ '04	29.19451 AU	min. Earth dist.	-1355 Feb	09 j 13:34	8° $\overline{32}$ '26	29.26426 AU
direct	-1363 Apr	12 j 15:45	19° $\overline{39}$ '14		direct	-1355 Apr	30 j 16:30	7° $\overline{08}$ '41	
conjunction	-1363 Jul	28 j 18:01	22° $\overline{11}$ '04	0°35'30	conjunction	-1355 Aug	15 j 13:53	9° $\overline{40}$ '13	1°08'18
minimum elong	-1363 Jul	28 j 18:01	22° $\overline{11}$ '04	0°35'31	minimum elong	-1355 Aug	15 j 13:53	9° $\overline{40}$ '13	1°08'19
max. Earth dist.	-1363 Jul	27 j 19:34	22° $\overline{08}$ '59	31.19787 AU	max. Earth dist.	-1355 Aug	14 j 14:13	9° $\overline{38}$ '01	31.26871 AU
retrograde	-1363 Nov	08 j 10:03	24° $\overline{38}$ '18		retrograde	-1355 Nov	25 j 19:31	12° $\overline{06}$ '43	
opposition	-1362 Jan	24 j 14:46	23° $\overline{16}$ '12	0°40'13	opposition	-1354 Feb	11 j 03:20	10° $\overline{44}$ '56	1°14'55
min. Earth dist.	-1362 Jan	25 j 11:01	23° $\overline{14}$ '47	29.20170 AU	min. Earth dist.	-1354 Feb	12 j 01:39	10° $\overline{43}$ '23	29.27435 AU

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Attention, astronomical year style is used: The year -1354 in astronomical counting style is the year 1355 BCE in historical counting style.

direct	-1354 May 03 j 03:01	9° Ω 19'48		direct	-1346 May 21 j 03:50	26° Ω 46'22	
max. Earth dist.	-1354 Aug 17 j 01:21	11° Ω 49'05	31.27826 AU				
conjunction	-1354 Aug 18 j 01:08	11° Ω 51'17	1°12'01	conjunction	-1346 Sep 04 j 14:56	29° Ω 17'21	1°37'31
minimum elong	-1354 Aug 18 j 01:08	11° Ω 51'17	1°12'02	minimum elong	-1346 Sep 04 j 14:56	29° Ω 17'21	1°37'31
retrograde	-1354 Nov 28 j 05:06	14° Ω 17'44		max. Earth dist.	-1346 Sep 03 j 14:51	29° Ω 15'06	31.31789 AU
opposition	-1353 Feb 13 j 14:15	12° Ω 56'00	1°18'50		-1346 Sep 23 j 22:09	0° \cap	
min. Earth dist.	-1353 Feb 14 j 12:16	12° Ω 54'29	29.28326 AU	retrograde	-1346 Dec 15 j 13:42	1° \cap 43'28	
direct	-1353 May 05 j 15:07	11° Ω 30'55		opposition	-1345 Mar 03 j 06:41	0° \cap 21'46	1°45'32
max. Earth dist.	-1353 Aug 19 j 11:33	14° Ω 00'05	31.28642 AU	min. Earth dist.	-1345 Mar 04 j 05:24	0° \cap 20'12	29.32171 AU
					-1345 Mar 16 j 16:06	30° \cap Ω	
conjunction	-1353 Aug 20 j 12:10	14° Ω 02'22	1°15'38	direct	-1345 May 23 j 14:32	28° Ω 56'48	
minimum elong	-1353 Aug 20 j 12:09	14° Ω 02'22	1°15'38		-1345 Jul 27 j 04:38	0° \cap	
	-1353 Sep 15 j 23:05	15° Ω		max. Earth dist.	-1345 Sep 06 j 01:44	1° \cap 25'33	31.32333 AU
retrograde	-1353 Nov 30 j 15:27	16° Ω 28'47		conjunction	-1345 Sep 07 j 01:03	1° \cap 27'44	1°40'06
opposition	-1352 Feb 16 j 01:16	15° Ω 07'05	1°22'37	minimum elong	-1345 Sep 07 j 01:02	1° \cap 27'44	1°40'06
min. Earth dist.	-1352 Feb 16 j 23:59	15° Ω 05'31	29.29089 AU	retrograde	-1345 Dec 17 j 22:54	3° \cap 53'51	
	-1352 Feb 20 j 08:17	15° \cap Ω		opposition	-1344 Mar 04 j 17:52	2° \cap 32'11	1°48'14
direct	-1352 May 07 j 00:54	13° Ω 42'01		min. Earth dist.	-1344 Mar 05 j 15:38	2° \cap 30'42	29.32737 AU
	-1352 Jul 18 j 15:27	15° Ω		direct	-1344 May 25 j 02:34	1° \cap 07'17	
conjunction	-1352 Aug 21 j 23:18	16° Ω 13'25	1°19'07	max. Earth dist.	-1344 Sep 07 j 11:38	3° \cap 35'58	31.32915 AU
minimum elong	-1352 Aug 21 j 23:18	16° Ω 13'25	1°19'08	conjunction	-1344 Sep 08 j 11:11	3° \cap 38'10	1°42'34
max. Earth dist.	-1352 Aug 20 j 23:12	16° Ω 11'10	31.29325 AU	minimum elong	-1344 Sep 08 j 11:10	3° \cap 38'10	1°42'34
retrograde	-1352 Dec 02 j 00:36	18° Ω 39'47		retrograde	-1344 Dec 19 j 09:15	6° \cap 04'20	
opposition	-1351 Feb 17 j 12:09	17° Ω 18'06	1°26'18	opposition	-1343 Mar 07 j 05:01	4° \cap 42'41	1°50'46
min. Earth dist.	-1351 Feb 18 j 11:11	17° Ω 16'31	29.29697 AU	min. Earth dist.	-1343 Mar 08 j 02:56	4° \cap 41'11	29.33336 AU
direct	-1351 May 09 j 13:57	15° Ω 53'03		direct	-1343 May 27 j 12:01	3° \cap 17'51	
max. Earth dist.	-1351 Aug 23 j 08:44	18° Ω 22'01	31.29863 AU				
conjunction	-1351 Aug 24 j 10:15	18° Ω 24'24	1°22'30	conjunction	-1343 Sep 10 j 21:25	5° \cap 48'42	1°44'52
minimum elong	-1351 Aug 24 j 10:15	18° Ω 24'24	1°22'31	minimum elong	-1343 Sep 10 j 21:24	5° \cap 48'42	1°44'52
retrograde	-1351 Dec 04 j 12:15	20° Ω 50'42		max. Earth dist.	-1343 Sep 09 j 23:00	5° \cap 46'36	31.33496 AU
opposition	-1350 Feb 19 j 23:09	19° Ω 29'01	1°29'51	retrograde	-1343 Dec 21 j 18:01	8° \cap 14'53	
min. Earth dist.	-1350 Feb 20 j 22:06	19° Ω 27'27	29.30182 AU	opposition	-1342 Mar 09 j 16:28	6° \cap 53'17	1°53'09
direct	-1350 May 12 j 01:16	18° Ω 03'58		min. Earth dist.	-1342 Mar 10 j 14:16	6° \cap 51'48	29.33884 AU
conjunction	-1350 Aug 26 j 21:08	20° Ω 35'15	1°25'46	direct	-1342 May 30 j 00:26	5° \cap 28'31	
minimum elong	-1350 Aug 26 j 21:08	20° Ω 35'15	1°25'47	max. Earth dist.	-1342 Sep 12 j 08:05	7° \cap 57'08	31.34003 AU
max. Earth dist.	-1350 Aug 25 j 20:35	20° Ω 32'58	31.30282 AU	conjunction	-1342 Sep 13 j 07:23	7° \cap 59'19	1°47'01
retrograde	-1350 Dec 06 j 21:08	23° Ω 01'31		minimum elong	-1342 Sep 13 j 07:22	7° \cap 59'19	1°47'02
opposition	-1349 Feb 22 j 10:17	21° Ω 39'49	1°33'16	retrograde	-1342 Dec 24 j 05:31	10° \cap 25'32	
min. Earth dist.	-1349 Feb 23 j 10:02	21° Ω 38'12	29.30558 AU	opposition	-1341 Mar 12 j 03:58	9° \cap 03'56	1°55'22
direct	-1349 May 14 j 13:25	20° Ω 14'47		min. Earth dist.	-1341 Mar 13 j 01:16	9° \cap 02'29	29.34353 AU
max. Earth dist.	-1349 Aug 28 j 06:16	22° Ω 43'36	31.30634 AU	direct	-1341 Jun 01 j 10:21	7° \cap 39'14	
conjunction	-1349 Aug 29 j 07:44	22° Ω 45'58	1°28'54	conjunction	-1341 Sep 15 j 17:33	10° \cap 09'58	1°49'01
minimum elong	-1349 Aug 29 j 07:44	22° Ω 45'58	1°28'54	minimum elong	-1341 Sep 15 j 17:33	10° \cap 09'58	1°49'01
retrograde	-1349 Dec 09 j 08:49	25° Ω 12'10		max. Earth dist.	-1341 Sep 14 j 19:26	10° \cap 07'54	31.34403 AU
opposition	-1348 Feb 24 j 21:15	23° Ω 50'28	1°36'33	retrograde	-1341 Dec 26 j 14:48	12° \cap 36'13	
min. Earth dist.	-1348 Feb 25 j 20:05	23° Ω 48'54	29.30903 AU	opposition	-1340 Mar 13 j 15:38	11° \cap 14'37	1°57'26
direct	-1348 May 16 j 02:12	22° Ω 25'25		min. Earth dist.	-1340 Mar 14 j 13:35	11° \cap 13'08	29.34691 AU
conjunction	-1348 Aug 30 j 18:14	24° Ω 56'32	1°31'54	direct	-1340 Jun 02 j 21:36	9° \cap 49'58	
minimum elong	-1348 Aug 30 j 18:13	24° Ω 56'32	1°31'55	max. Earth dist.	-1340 Sep 16 j 04:31	12° \cap 18'28	31.34671 AU
max. Earth dist.	-1348 Aug 29 j 17:50	24° Ω 54'16	31.30965 AU	conjunction	-1340 Sep 17 j 03:28	12° \cap 20'37	1°50'52
retrograde	-1348 Dec 10 j 18:49	27° Ω 22'42		minimum elong	-1340 Sep 17 j 03:28	12° \cap 20'37	1°50'53
opposition	-1347 Feb 26 j 08:25	26° Ω 00'58	1°39'41	retrograde	-1340 Dec 28 j 02:52	14° \cap 46'53	
min. Earth dist.	-1347 Feb 27 j 08:01	25° Ω 59'21	29.31255 AU	opposition	-1339 Mar 16 j 03:11	13° \cap 25'16	1°59'19
direct	-1347 May 18 j 14:58	24° Ω 35'56		min. Earth dist.	-1339 Mar 17 j 00:12	13° \cap 23'50	29.34883 AU
max. Earth dist.	-1347 Sep 01 j 03:59	27° Ω 04'41	31.31342 AU	direct	-1339 Jun 05 j 10:20	12° \cap 00'38	
conjunction	-1347 Sep 02 j 04:35	27° Ω 06'59	1°34'47	conjunction	-1339 Sep 19 j 13:31	14° \cap 31'12	1°52'33
minimum elong	-1347 Sep 02 j 04:34	27° Ω 06'59	1°34'46	minimum elong	-1339 Sep 19 j 13:31	14° \cap 31'12	1°52'33
retrograde	-1347 Dec 13 j 05:03	29° Ω 33'06		max. Earth dist.	-1339 Sep 18 j 15:22	14° \cap 29'08	31.34774 AU
opposition	-1346 Feb 28 j 19:23	28° Ω 11'23	1°42'41	retrograde	-1339 Dec 30 j 13:16	16° \cap 57'29	
min. Earth dist.	-1346 Mar 01 j 17:37	28° Ω 09'51	29.31667 AU	opposition	-1338 Mar 18 j 14:55	15° \cap 35'50	2°01'02
				min. Earth dist.	-1338 Mar 19 j 12:50	15° \cap 34'20	29.34919 AU

Attention, astronomical year style is used: The year -1338 in astronomical counting style is the year 1339 BCE in historical counting style.

direct	-1338 Jun 07 j 22:51	14° \mathring{M} 11'12		direct	-1330 Jun 25 j 19:06	1° \mathring{A} 32'15	
				max. Earth dist.	-1330 Oct 08 j 10:14	4° \mathring{A} 00'29	31.34376 AU
conjunction	-1338 Sep 21 j 23:23	16° \mathring{M} 41'40	1°54'05				
minimum elong	-1338 Sep 21 j 23:23	16° \mathring{M} 41'40	1°54'05	conjunction	-1330 Oct 09 j 02:49	4° \mathring{A} 02'02	2°00'20
max. Earth dist.	-1338 Sep 21 j 01:03	16° \mathring{M} 39'35	31.34750 AU	minimum elong	-1330 Oct 09 j 02:50	4° \mathring{A} 02'02	2°00'20
retrograde	-1337 Jan 01 j 23:44	19° \mathring{M} 07'58		retrograde	-1329 Jan 19 j 08:58	6° \mathring{A} 28'50	
opposition	-1337 Mar 21 j 02:38	17° \mathring{M} 46'15	2°02'35	opposition	-1329 Apr 08 j 01:34	5° \mathring{A} 06'55	2°08'33
min. Earth dist.	-1337 Mar 21 j 23:15	17° \mathring{M} 44'51	29.34831 AU	min. Earth dist.	-1329 Apr 08 j 18:12	5° \mathring{A} 05'47	29.34549 AU
direct	-1337 Jun 10 j 11:56	16° \mathring{M} 21'38		direct	-1329 Jun 28 j 06:23	3° \mathring{A} 42'41	
max. Earth dist.	-1337 Sep 23 j 11:02	18° \mathring{M} 49'56	31.34609 AU				
				conjunction	-1329 Oct 11 j 12:00	6° \mathring{A} 12'26	2°00'21
conjunction	-1337 Sep 24 j 09:02	18° \mathring{M} 51'59	1°55'27	minimum elong	-1329 Oct 11 j 12:00	6° \mathring{A} 12'26	2°00'20
minimum elong	-1337 Sep 24 j 09:02	18° \mathring{M} 51'59	1°55'26	max. Earth dist.	-1329 Oct 10 j 19:44	6° \mathring{A} 10'54	31.34410 AU
retrograde	-1336 Jan 04 j 09:04	21° \mathring{M} 18'17		retrograde	-1328 Jan 21 j 20:02	8° \mathring{A} 39'20	
opposition	-1336 Mar 22 j 14:26	19° \mathring{M} 56'30	2°03'57	opposition	-1328 Apr 09 j 13:42	7° \mathring{A} 17'25	2°08'29
min. Earth dist.	-1336 Mar 23 j 11:36	19° \mathring{M} 55'04	29.34665 AU	min. Earth dist.	-1328 Apr 10 j 04:48	7° \mathring{A} 16'23	29.34527 AU
direct	-1336 Jun 11 j 23:36	18° \mathring{M} 31'53		direct	-1328 Jun 29 j 18:40	5° \mathring{A} 53'16	
conjunction	-1336 Sep 25 j 18:40	21° \mathring{M} 02'07	1°56'39	conjunction	-1328 Oct 12 j 21:21	8° \mathring{A} 22'57	2°00'12
minimum elong	-1336 Sep 25 j 18:40	21° \mathring{M} 02'07	1°56'39	minimum elong	-1328 Oct 12 j 21:21	8° \mathring{A} 22'57	2°00'11
max. Earth dist.	-1336 Sep 24 j 21:37	21° \mathring{M} 00'09	31.34425 AU	max. Earth dist.	-1328 Oct 12 j 05:18	8° \mathring{A} 21'26	31.34325 AU
retrograde	-1335 Jan 05 j 18:06	23° \mathring{M} 28'25		retrograde	-1327 Jan 23 j 06:33	10° \mathring{A} 49'58	
opposition	-1335 Mar 25 j 01:59	22° \mathring{M} 06'35	2°05'09	opposition	-1327 Apr 12 j 01:54	9° \mathring{A} 28'01	2°08'14
min. Earth dist.	-1335 Mar 25 j 22:06	22° \mathring{M} 05'13	29.34470 AU	min. Earth dist.	-1327 Apr 12 j 17:31	9° \mathring{A} 26'58	29.34386 AU
direct	-1335 Jun 14 j 12:50	20° \mathring{M} 41'58		direct	-1327 Jul 02 j 06:16	8° \mathring{A} 03'56	
max. Earth dist.	-1335 Sep 27 j 07:05	23° \mathring{M} 10'07	31.34241 AU				
				conjunction	-1327 Oct 15 j 06:45	10° \mathring{A} 33'33	1°59'52
conjunction	-1335 Sep 28 j 04:10	23° \mathring{M} 12'05	1°57'41	minimum elong	-1327 Oct 15 j 06:45	10° \mathring{A} 33'33	1°59'51
minimum elong	-1335 Sep 28 j 04:10	23° \mathring{M} 12'05	1°57'41	max. Earth dist.	-1327 Oct 14 j 15:40	10° \mathring{A} 32'08	31.34118 AU
retrograde	-1334 Jan 08 j 04:17	25° \mathring{M} 38'25		retrograde	-1326 Jan 25 j 16:47	13° \mathring{A} 00'39	
opposition	-1334 Mar 27 j 13:49	24° \mathring{M} 16'32	2°06'11	opposition	-1326 Apr 14 j 14:15	11° \mathring{A} 38'40	2°07'47
min. Earth dist.	-1334 Mar 28 j 09:30	24° \mathring{M} 15'12	29.34327 AU	min. Earth dist.	-1326 Apr 15 j 04:49	11° \mathring{A} 37'41	29.34096 AU
direct	-1334 Jun 16 j 23:09	22° \mathring{M} 51'56		direct	-1326 Jul 04 j 19:58	10° \mathring{A} 14'38	
conjunction	-1334 Sep 30 j 13:34	25° \mathring{M} 21'57	1°58'33	conjunction	-1326 Oct 17 j 15:54	12° \mathring{A} 44'10	1°59'22
minimum elong	-1334 Sep 30 j 13:34	25° \mathring{M} 21'57	1°58'34	minimum elong	-1326 Oct 17 j 15:54	12° \mathring{A} 44'10	1°59'22
max. Earth dist.	-1334 Sep 29 j 18:17	25° \mathring{M} 20'09	31.34132 AU	max. Earth dist.	-1326 Oct 17 j 00:32	12° \mathring{A} 42'43	31.33762 AU
retrograde	-1333 Jan 10 j 12:33	27° \mathring{M} 48'21		retrograde	-1325 Jan 28 j 03:33	15° \mathring{A} 11'22	
opposition	-1333 Mar 30 j 01:43	26° \mathring{M} 26'25	2°07'01	opposition	-1325 Apr 17 j 02:43	13° \mathring{A} 49'19	2°07'10
min. Earth dist.	-1333 Mar 30 j 20:35	26° \mathring{M} 25'08	29.34258 AU	min. Earth dist.	-1325 Apr 17 j 17:03	13° \mathring{A} 48'21	29.33680 AU
direct	-1333 Jun 19 j 11:25	25° \mathring{M} 01'52		direct	-1325 Jul 07 j 06:41	12° \mathring{A} 25'19	
				max. Earth dist.	-1325 Oct 19 j 11:26	14° \mathring{A} 53'25	31.33286 AU
conjunction	-1333 Oct 02 j 22:52	27° \mathring{M} 31'49	1°59'15				
minimum elong	-1333 Oct 02 j 22:52	27° \mathring{M} 31'49	1°59'15	conjunction	-1325 Oct 20 j 01:14	14° \mathring{A} 54'43	1°58'42
max. Earth dist.	-1333 Oct 02 j 03:19	27° \mathring{M} 29'58	31.34118 AU	minimum elong	-1325 Oct 20 j 01:14	14° \mathring{A} 54'43	1°58'42
retrograde	-1332 Jan 12 j 23:53	29° \mathring{M} 58'17		retrograde	-1324 Jan 30 j 11:36	17° \mathring{A} 22'00	
opposition	-1332 Mar 31 j 13:27	28° \mathring{M} 36'20	2°07'41	opposition	-1324 Apr 18 j 15:01	15° \mathring{A} 59'53	2°06'23
min. Earth dist.	-1332 Apr 01 j 07:05	28° \mathring{M} 35'09	29.34296 AU	min. Earth dist.	-1324 Apr 19 j 04:51	15° \mathring{A} 58'57	29.33145 AU
direct	-1332 Jun 20 j 20:42	27° \mathring{M} 11'51		direct	-1324 Jul 08 j 19:23	14° \mathring{A} 35'53	
conjunction	-1332 Oct 04 j 08:16	29° \mathring{M} 41'44	1°59'47	conjunction	-1324 Oct 21 j 10:16	17° \mathring{A} 05'11	1°57'53
minimum elong	-1332 Oct 04 j 08:16	29° \mathring{M} 41'44	1°59'48	minimum elong	-1324 Oct 21 j 10:16	17° \mathring{A} 05'11	1°57'53
max. Earth dist.	-1332 Oct 03 j 14:30	29° \mathring{M} 40'04	31.34186 AU	max. Earth dist.	-1324 Oct 20 j 20:04	17° \mathring{A} 03'51	31.32725 AU
	-1332 Oct 12 j 11:08	0° \mathring{A}		retrograde	-1323 Jan 31 j 22:39	19° \mathring{A} 32'32	
retrograde	-1331 Jan 14 j 09:18	2° \mathring{A} 08'19		opposition	-1323 Apr 21 j 03:22	18° \mathring{A} 10'20	2°05'24
opposition	-1331 Apr 03 j 01:25	0° \mathring{A} 46'23	2°08'09	min. Earth dist.	-1323 Apr 21 j 16:00	18° \mathring{A} 09'29	29.32563 AU
min. Earth dist.	-1331 Apr 03 j 19:08	0° \mathring{A} 45'11	29.34381 AU	direct	-1323 Jul 11 j 05:23	16° \mathring{A} 46'20	
	-1331 May 03 j 05:47	30° \mathring{R} \mathring{M}					
direct	-1331 Jun 23 j 07:25	29° \mathring{M} 21'58		conjunction	-1323 Oct 23 j 19:20	19° \mathring{A} 15'31	1°56'53
	-1331 Aug 11 j 13:23	0° \mathring{A}		minimum elong	-1323 Oct 23 j 19:20	19° \mathring{A} 15'31	1°56'52
				max. Earth dist.	-1323 Oct 23 j 06:59	19° \mathring{A} 14'21	31.32132 AU
conjunction	-1331 Oct 06 j 17:27	1° \mathring{A} 51'48	2°00'09	retrograde	-1322 Feb 03 j 07:49	21° \mathring{A} 42'57	
minimum elong	-1331 Oct 06 j 17:27	1° \mathring{A} 51'48	2°00'08	opposition	-1322 Apr 23 j 15:53	20° \mathring{A} 20'40	2°04'15
max. Earth dist.	-1331 Oct 05 j 23:36	1° \mathring{A} 50'08	31.34291 AU	min. Earth dist.	-1322 Apr 24 j 04:21	20° \mathring{A} 19'49	29.31979 AU
retrograde	-1330 Jan 16 j 21:35	4° \mathring{A} 18'29		direct	-1322 Jul 13 j 16:57	18° \mathring{A} 56'41	
opposition	-1330 Apr 05 j 13:20	2° \mathring{A} 56'34	2°08'27				
min. Earth dist.	-1330 Apr 06 j 05:30	2° \mathring{A} 55'28	29.34484 AU	conjunction	-1322 Oct 26 j 04:15	21° \mathring{A} 25'44	1°55'43

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Attention, astronomical year style is used: The year -1322 in astronomical counting style is the year 1323 BCE in historical counting style.

minimum elong	-1322 Oct 26 j 04:15	21° 25 '44	1°55'43	conjunction	-1314 Nov 12 j 04:40	8° 11 '50'10	1°40'36
max. Earth dist.	-1322 Oct 25 j 16:14	21° 25 '436	31.31588 AU	minimum elong	-1314 Nov 12 j 04:41	8° 11 '50'10	1°40'35
retrograde	-1321 Feb 05 j 19:37	23° 25 '53'16		max. Earth dist.	-1314 Nov 12 j 00:01	8° 11 '49'43	31.28172 AU
opposition	-1321 Apr 26 j 04:17	22° 25 '30'54	2°02'56	retrograde	-1313 Feb 23 j 11:50	11° 11 '18'52	
min. Earth dist.	-1321 Apr 26 j 14:43	22° 25 '30'12	29.31473 AU	opposition	-1313 May 14 j 10:03	9° 11 '56'12	1°46'06
direct	-1321 Jul 16 j 04:01	21° 25 '06'57		min. Earth dist.	-1313 May 14 j 14:56	9° 11 '55'52	29.27868 AU
				direct	-1313 Aug 02 j 23:38	8° 11 '32'47	
conjunction	-1321 Oct 28 j 13:12	23° 25 '35'55	1°54'24				
minimum elong	-1321 Oct 28 j 13:12	23° 25 '35'55	1°54'23	conjunction	-1313 Nov 14 j 13:49	11° 11 '01'13	1°38'01
max. Earth dist.	-1321 Oct 28 j 02:42	23° 25 '34'56	31.31121 AU	minimum elong	-1313 Nov 14 j 13:49	11° 11 '01'13	1°38'00
retrograde	-1320 Feb 08 j 06:42	26° 25 '03'34		max. Earth dist.	-1313 Nov 14 j 09:10	11° 11 '00'47	31.27347 AU
opposition	-1320 Apr 27 j 16:51	24° 25 '41'08	2°01'26	retrograde	-1312 Feb 25 j 23:59	13° 11 '30'03	
min. Earth dist.	-1320 Apr 28 j 03:14	24° 25 '40'26	29.31050 AU	opposition	-1312 May 15 j 22:53	12° 11 '07'19	1°43'17
direct	-1320 Jul 17 j 14:20	23° 25 '17'15		min. Earth dist.	-1312 May 16 j 02:12	12° 11 '07'06	29.26965 AU
				direct	-1312 Aug 04 j 10:39	10° 11 '43'55	
conjunction	-1320 Oct 29 j 22:09	25° 25 '46'07	1°52'54				
minimum elong	-1320 Oct 29 j 22:09	25° 25 '46'07	1°52'54	conjunction	-1312 Nov 15 j 23:00	13° 11 '12'17	1°35'18
max. Earth dist.	-1320 Oct 29 j 12:35	25° 25 '45'13	31.30750 AU	minimum elong	-1312 Nov 15 j 23:00	13° 11 '12'17	1°35'17
retrograde	-1319 Feb 09 j 17:56	28° 25 '13'54		max. Earth dist.	-1312 Nov 15 j 19:19	13° 11 '11'56	31.26383 AU
opposition	-1319 Apr 30 j 05:11	26° 25 '51'26	1°59'45		-1311 Jan 07 j 23:11	15° 11 '	
min. Earth dist.	-1319 Apr 30 j 13:31	26° 25 '50'52	29.30700 AU	retrograde	-1311 Feb 27 j 11:15	15° 11 '41'15	
direct	-1319 Jul 20 j 02:08	25° 25 '27'36			-1311 Apr 21 j 13:08	15° 11 ' 11 '	
				opposition	-1311 May 18 j 11:48	14° 11 '18'24	1°40'18
conjunction	-1319 Nov 01 j 07:07	27° 25 '56'25	1°51'15	min. Earth dist.	-1311 May 18 j 15:25	14° 11 '18'10	29.25955 AU
minimum elong	-1319 Nov 01 j 07:07	27° 25 '56'26	1°51'14	direct	-1311 Aug 06 j 20:47	12° 11 '55'01	
max. Earth dist.	-1319 Oct 31 j 22:11	27° 25 '55'35	31.30429 AU		-1311 Nov 08 j 01:06	15° 11 '	
	-1318 Jan 04 j 20:03	0° 11 '					
retrograde	-1318 Feb 12 j 05:43	0° 11 '24'21		conjunction	-1311 Nov 18 j 08:07	15° 11 '23'17	1°32'27
	-1318 Mar 23 j 21:43	30° 11 ' 11 '		minimum elong	-1311 Nov 18 j 08:08	15° 11 '23'17	1°32'25
opposition	-1318 May 02 j 17:55	29° 11 '01'51	1°57'53	max. Earth dist.	-1311 Nov 18 j 05:26	15° 11 '23'02	31.25364 AU
min. Earth dist.	-1318 May 03 j 02:09	29° 11 '01'18	29.30398 AU	retrograde	-1310 Mar 01 j 22:54	17° 11 '52'22	
direct	-1318 Jul 22 j 13:29	27° 11 '38'07		opposition	-1310 May 21 j 00:43	16° 11 '29'26	1°37'11
	-1318 Oct 31 j 15:18	0° 11 '		min. Earth dist.	-1310 May 21 j 02:16	16° 11 '29'20	29.24917 AU
				direct	-1310 Aug 09 j 08:46	15° 11 '06'03	
conjunction	-1318 Nov 03 j 16:04	0° 11 '06'52	1°49'26				
minimum elong	-1318 Nov 03 j 16:04	0° 11 '06'52	1°49'25	conjunction	-1310 Nov 20 j 17:04	17° 11 '34'14	1°29'28
max. Earth dist.	-1318 Nov 03 j 08:48	0° 11 '06'11	31.30137 AU	minimum elong	-1310 Nov 20 j 17:04	17° 11 '34'14	1°29'27
retrograde	-1317 Feb 14 j 16:50	2° 11 '34'56		max. Earth dist.	-1310 Nov 20 j 14:58	17° 11 '34'02	31.24335 AU
opposition	-1317 May 05 j 06:37	1° 11 '12'26	1°55'52	retrograde	-1309 Mar 04 j 11:20	20° 11 '03'28	
min. Earth dist.	-1317 May 05 j 13:27	1° 11 '11'58	29.30081 AU	opposition	-1309 May 23 j 13:44	18° 11 '40'26	1°33'56
	-1317 Jun 28 j 07:02	30° 11 ' 11 '		min. Earth dist.	-1309 May 23 j 15:04	18° 11 '40'20	29.23918 AU
direct	-1317 Jul 25 j 02:44	29° 11 '48'46		direct	-1309 Aug 11 j 20:16	17° 11 '17'04	
	-1317 Aug 20 j 06:35	0° 11 '					
conjunction	-1317 Nov 06 j 01:05	2° 11 '17'28	1°47'27	conjunction	-1309 Nov 23 j 02:15	19° 11 '45'11	1°26'22
minimum elong	-1317 Nov 06 j 01:05	2° 11 '17'28	1°47'26	minimum elong	-1309 Nov 23 j 02:15	19° 11 '45'11	1°26'20
max. Earth dist.	-1317 Nov 05 j 17:44	2° 11 '16'47	31.29803 AU	max. Earth dist.	-1309 Nov 23 j 02:03	19° 11 '45'10	31.23374 AU
retrograde	-1316 Feb 17 j 04:28	4° 11 '45'42		retrograde	-1308 Mar 05 j 23:07	22° 11 '14'32	
opposition	-1316 May 06 j 19:16	3° 11 '23'10	1°53'40	opposition	-1308 May 25 j 02:28	20° 11 '51'26	1°30'33
min. Earth dist.	-1316 May 07 j 01:42	3° 11 '22'44	29.29720 AU	min. Earth dist.	-1308 May 25 j 02:04	20° 11 '51'28	29.22987 AU
direct	-1316 Jul 26 j 12:57	1° 11 '59'35		direct	-1308 Aug 13 j 09:22	19° 11 '28'05	
conjunction	-1316 Nov 07 j 10:19	4° 11 '28'14	1°45'19	conjunction	-1308 Nov 24 j 11:18	21° 11 '56'10	1°23'07
minimum elong	-1316 Nov 07 j 10:20	4° 11 '28'14	1°45'19	minimum elong	-1308 Nov 24 j 11:18	21° 11 '56'10	1°23'07
max. Earth dist.	-1316 Nov 07 j 04:38	4° 11 '27'42	31.29392 AU	max. Earth dist.	-1308 Nov 24 j 11:15	21° 11 '56'09	31.22496 AU
retrograde	-1315 Feb 18 j 13:46	6° 11 '56'37		retrograde	-1307 Mar 08 j 11:00	24° 11 '25'41	
opposition	-1315 May 09 j 08:08	5° 11 '34'04	1°51'18	opposition	-1307 May 27 j 15:26	23° 11 '02'31	1°27'01
min. Earth dist.	-1315 May 09 j 13:59	5° 11 '33'40	29.29240 AU	min. Earth dist.	-1307 May 27 j 14:11	23° 11 '02'36	29.22154 AU
direct	-1315 Jul 29 j 01:43	4° 11 '10'33		direct	-1307 Aug 15 j 19:28	21° 11 '39'14	
conjunction	-1315 Nov 09 j 19:21	6° 11 '39'09	1°43'02	conjunction	-1307 Nov 26 j 20:25	24° 11 '07'15	1°19'46
minimum elong	-1315 Nov 09 j 19:21	6° 11 '39'09	1°43'00	minimum elong	-1307 Nov 26 j 20:25	24° 11 '07'15	1°19'44
max. Earth dist.	-1315 Nov 09 j 13:14	6° 11 '38'34	31.28856 AU	max. Earth dist.	-1307 Nov 26 j 22:33	24° 11 '07'27	31.21702 AU
retrograde	-1314 Feb 21 j 01:50	9° 11 '07'41		retrograde	-1306 Mar 10 j 20:51	26° 11 '36'57	
opposition	-1314 May 11 j 21:02	7° 11 '45'05	1°48'47	opposition	-1306 May 30 j 04:28	25° 11 '13'44	1°23'22
min. Earth dist.	-1314 May 12 j 01:46	7° 11 '44'46	29.28633 AU	min. Earth dist.	-1306 May 30 j 02:08	25° 11 '13'53	29.21382 AU
direct	-1314 Jul 31 j 12:03	6° 11 '21'38		direct	-1306 Aug 18 j 08:41	23° 11 '50'30	

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Attention, astronomical year style is used: The year -1306 in astronomical counting style is the year 1307 BCE in historical counting style.

conjunction	-1306 Nov 29 j 05:32	26° \mathbb{M} 18'29	1°16'17	conjunction	-1298 Dec 16 j 09:44	13° \mathbb{Z} 52'19	0°44'49
minimum elong	-1306 Nov 29 j 05:32	26° \mathbb{M} 18'29	1°16'16	minimum elong	-1298 Dec 16 j 09:44	13° \mathbb{Z} 52'19	0°44'49
max. Earth dist.	-1306 Nov 29 j 07:42	26° \mathbb{M} 18'41	31.20970 AU	max. Earth dist.	-1298 Dec 16 j 18:56	13° \mathbb{Z} 53'11	31.12888 AU
retrograde	-1305 Mar 13 j 09:49	28° \mathbb{M} 48'21		retrograde	-1297 Mar 31 j 08:55	16° \mathbb{Z} 23'25	
opposition	-1305 Jun 01 j 17:25	27° \mathbb{M} 25'06	1°19'35	opposition	-1297 Jun 20 j 02:24	14° \mathbb{Z} 59'31	0°45'35
min. Earth dist.	-1305 Jun 01 j 13:38	27° \mathbb{M} 25'22	29.20663 AU	min. Earth dist.	-1297 Jun 19 j 17:09	15° \mathbb{Z} 00'09	29.12281 AU
direct	-1305 Aug 20 j 19:21	26° \mathbb{M} 01'56		direct	-1297 Sep 07 j 14:45	13° \mathbb{Z} 36'27	
conjunction	-1305 Dec 01 j 14:50	28° \mathbb{M} 29'53	1°12'41	conjunction	-1297 Dec 18 j 19:17	16° \mathbb{Z} 03'59	0°40'32
minimum elong	-1305 Dec 01 j 14:50	28° \mathbb{M} 29'53	1°12'40	minimum elong	-1297 Dec 18 j 19:18	16° \mathbb{Z} 03'59	0°40'31
max. Earth dist.	-1305 Dec 01 j 18:43	28° \mathbb{M} 30'15	31.20248 AU	max. Earth dist.	-1297 Dec 19 j 04:32	16° \mathbb{Z} 04'52	31.11658 AU
	-1304 Jan 13 j 02:17	0° \mathbb{Z}		retrograde	-1296 Apr 01 j 22:22	18° \mathbb{Z} 35'14	
retrograde	-1304 Mar 14 j 19:58	0° \mathbb{Z} 59'57		opposition	-1296 Jun 21 j 15:22	17° \mathbb{Z} 11'15	0°40'58
	-1304 May 19 j 15:50	30° \mathbb{R} \mathbb{M}		min. Earth dist.	-1296 Jun 21 j 04:37	17° \mathbb{Z} 11'59	29.11098 AU
opposition	-1304 Jun 03 j 06:31	29° \mathbb{M} 36'39	1°15'41	direct	-1296 Sep 09 j 01:54	15° \mathbb{Z} 48'10	
min. Earth dist.	-1304 Jun 03 j 02:40	29° \mathbb{M} 36'55	29.19925 AU				
direct	-1304 Aug 22 j 06:53	28° \mathbb{M} 13'33		conjunction	-1296 Dec 20 j 04:59	18° \mathbb{Z} 15'41	0°36'12
	-1304 Nov 14 j 13:01	0° \mathbb{Z}		minimum elong	-1296 Dec 20 j 04:59	18° \mathbb{Z} 15'41	0°36'10
conjunction	-1304 Dec 03 j 00:08	0° \mathbb{Z} 41'27	1°08'59	max. Earth dist.	-1296 Dec 20 j 16:01	18° \mathbb{Z} 16'43	31.10519 AU
minimum elong	-1304 Dec 03 j 00:08	0° \mathbb{Z} 41'27	1°08'57	retrograde	-1295 Apr 04 j 08:33	20° \mathbb{Z} 47'05	
max. Earth dist.	-1304 Dec 03 j 04:22	0° \mathbb{Z} 41'51	31.19500 AU	opposition	-1295 Jun 24 j 04:24	19° \mathbb{Z} 23'02	0°36'17
retrograde	-1303 Mar 17 j 07:52	3° \mathbb{Z} 11'42		min. Earth dist.	-1295 Jun 23 j 17:15	19° \mathbb{Z} 23'48	29.10017 AU
opposition	-1303 Jun 05 j 19:31	1° \mathbb{Z} 48'22	1°11'39	direct	-1295 Sep 11 j 13:33	17° \mathbb{Z} 59'59	
min. Earth dist.	-1303 Jun 05 j 14:01	1° \mathbb{Z} 48'44	29.19137 AU	conjunction	-1295 Dec 22 j 14:42	20° \mathbb{Z} 27'28	0°31'47
direct	-1303 Aug 24 j 17:29	0° \mathbb{Z} 25'18		minimum elong	-1295 Dec 22 j 14:42	20° \mathbb{Z} 27'28	0°31'46
conjunction	-1303 Dec 05 j 09:38	2° \mathbb{Z} 53'11	1°05'10	max. Earth dist.	-1295 Dec 23 j 02:28	20° \mathbb{Z} 28'35	31.09513 AU
minimum elong	-1303 Dec 05 j 09:38	2° \mathbb{Z} 53'11	1°05'08	retrograde	-1294 Apr 06 j 20:48	22° \mathbb{Z} 59'03	
max. Earth dist.	-1303 Dec 05 j 14:43	2° \mathbb{Z} 53'40	31.18666 AU	opposition	-1294 Jun 26 j 17:22	21° \mathbb{Z} 34'57	0°31'33
retrograde	-1302 Mar 19 j 19:31	5° \mathbb{Z} 23'36		min. Earth dist.	-1294 Jun 26 j 04:15	21° \mathbb{Z} 35'51	29.09065 AU
opposition	-1302 Jun 08 j 08:50	4° \mathbb{Z} 00'13	1°07'32	direct	-1294 Sep 14 j 00:10	20° \mathbb{Z} 11'56	
min. Earth dist.	-1302 Jun 08 j 03:41	4° \mathbb{Z} 00'34	29.18255 AU	conjunction	-1294 Dec 25 j 00:29	22° \mathbb{Z} 39'26	0°27'20
direct	-1302 Aug 27 j 03:08	2° \mathbb{Z} 37'11		minimum elong	-1294 Dec 25 j 00:29	22° \mathbb{Z} 39'26	0°27'19
conjunction	-1302 Dec 07 j 19:10	5° \mathbb{Z} 05'01	1°01'16	max. Earth dist.	-1294 Dec 25 j 13:18	22° \mathbb{Z} 40'38	31.08607 AU
minimum elong	-1302 Dec 07 j 19:11	5° \mathbb{Z} 05'01	1°01'15	retrograde	-1293 Apr 09 j 08:37	25° \mathbb{Z} 11'13	
max. Earth dist.	-1302 Dec 08 j 01:07	5° \mathbb{Z} 05'35	31.17734 AU	opposition	-1293 Jun 29 j 06:30	23° \mathbb{Z} 47'04	0°26'46
retrograde	-1301 Mar 22 j 08:02	7° \mathbb{Z} 35'36		min. Earth dist.	-1293 Jun 28 j 17:29	23° \mathbb{Z} 47'57	29.08206 AU
opposition	-1301 Jun 10 j 21:59	6° \mathbb{Z} 12'08	1°03'19	direct	-1293 Sep 16 j 09:31	22° \mathbb{Z} 24'06	
min. Earth dist.	-1301 Jun 10 j 15:09	6° \mathbb{Z} 12'36	29.17245 AU	conjunction	-1293 Dec 27 j 10:29	24° \mathbb{Z} 51'37	0°22'50
direct	-1301 Aug 29 j 15:06	4° \mathbb{Z} 49'08		minimum elong	-1293 Dec 27 j 10:29	24° \mathbb{Z} 51'37	0°22'49
conjunction	-1301 Dec 10 j 04:50	7° \mathbb{Z} 16'54	0°57'16	max. Earth dist.	-1293 Dec 28 j 00:31	24° \mathbb{Z} 52'56	31.07789 AU
minimum elong	-1301 Dec 10 j 04:50	7° \mathbb{Z} 16'54	0°57'15	retrograde	-1292 Apr 10 j 21:24	27° \mathbb{Z} 23'34	
max. Earth dist.	-1301 Dec 10 j 10:40	7° \mathbb{Z} 17'27	31.16655 AU	opposition	-1292 Jun 30 j 19:18	25° \mathbb{Z} 59'25	0°21'56
retrograde	-1300 Mar 23 j 21:08	9° \mathbb{Z} 47'38		min. Earth dist.	-1292 Jun 30 j 04:27	26° \mathbb{Z} 00'26	29.07403 AU
opposition	-1300 Jun 12 j 11:06	8° \mathbb{Z} 24'05	0°59'00	direct	-1292 Sep 17 j 20:48	24° \mathbb{Z} 36'30	
min. Earth dist.	-1300 Jun 12 j 04:36	8° \mathbb{Z} 24'31	29.16103 AU	conjunction	-1292 Dec 28 j 20:29	27° \mathbb{Z} 04'02	0°18'18
direct	-1300 Aug 31 j 01:54	7° \mathbb{Z} 01'03		minimum elong	-1292 Dec 28 j 20:29	27° \mathbb{Z} 04'02	0°18'17
conjunction	-1300 Dec 11 j 14:35	9° \mathbb{Z} 28'47	0°53'12	max. Earth dist.	-1292 Dec 29 j 10:37	27° \mathbb{Z} 05'22	31.06998 AU
minimum elong	-1300 Dec 11 j 14:35	9° \mathbb{Z} 28'47	0°53'11	retrograde	-1291 Apr 13 j 11:10	29° \mathbb{Z} 36'12	
max. Earth dist.	-1300 Dec 11 j 21:57	9° \mathbb{Z} 29'29	31.15460 AU	opposition	-1291 Jul 03 j 08:31	28° \mathbb{Z} 12'01	0°17'03
retrograde	-1299 Mar 26 j 09:20	11° \mathbb{Z} 59'38		min. Earth dist.	-1291 Jul 02 j 17:50	28° \mathbb{Z} 13'01	29.06620 AU
opposition	-1299 Jun 15 j 00:14	10° \mathbb{Z} 35'58	0°54'36	direct	-1291 Sep 20 j 06:32	26° \mathbb{Z} 49'09	
min. Earth dist.	-1299 Jun 14 j 16:24	10° \mathbb{Z} 36'30	29.14846 AU	conjunction	-1291 Dec 31 j 06:40	29° \mathbb{Z} 16'43	0°13'44
direct	-1299 Sep 02 j 14:42	9° \mathbb{Z} 12'56		minimum elong	-1291 Dec 31 j 06:40	29° \mathbb{Z} 16'43	0°13'43
conjunction	-1299 Dec 14 j 00:01	11° \mathbb{Z} 40'35	0°49'03	behind sun begin	-1291 Dec 31 j 03:07	29° \mathbb{Z} 16'24	
minimum elong	-1299 Dec 14 j 00:01	11° \mathbb{Z} 40'35	0°49'01	behind sun end	-1291 Dec 31 j 10:13	29° \mathbb{Z} 17'02	
max. Earth dist.	-1299 Dec 14 j 07:14	11° \mathbb{Z} 41'16	31.14180 AU	max. Earth dist.	-1291 Dec 31 j 22:29	29° \mathbb{Z} 18'12	31.06205 AU
retrograde	-1298 Mar 28 j 21:59	14° \mathbb{Z} 11'34			-1290 Jan 19 j 12:41	0° \mathbb{Z}	
opposition	-1298 Jun 17 j 13:27	12° \mathbb{Z} 47'47	0°50'08	retrograde	-1290 Apr 16 j 00:16	1° \mathbb{Z} 49'04	
min. Earth dist.	-1298 Jun 17 j 05:07	12° \mathbb{Z} 48'21	29.13555 AU	opposition	-1290 Jul 05 j 21:37	0° \mathbb{Z} 24'52	0°12'09
direct	-1298 Sep 05 j 01:20	11° \mathbb{Z} 24'43		min. Earth dist.	-1290 Jul 05 j 05:44	0° \mathbb{Z} 25'56	29.05796 AU
					-1290 Jul 21 j 08:17	30° \mathbb{R} \mathbb{Z}	
				direct	-1290 Sep 22 j 18:13	29° \mathbb{Z} 02'02	

Attention, astronomical year style is used: The year -1290 in astronomical counting style is the year 1291 BCE in historical counting style.

	-1290 Nov 21 j 11:43	0°♊		opposition	-1283 Jul 21 j 16:41	15°♊56'42	0°-22'-18
				min. Earth dist.	-1283 Jul 20 j 20:48	15°♊58'04	28.98162 AU
conjunction	-1289 Jan 02 j 17:00	1°♊29'37	0°09'09	direct	-1283 Oct 08 j 04:04	14°♊33'44	
minimum elong	-1289 Jan 02 j 17:00	1°♊29'37	0°09'08				
behind sun begin	-1289 Jan 02 j 11:32	1°♊29'07		conjunction	-1282 Jan 17 j 19:27	17°♊01'15	0°-23'-7
behind sun end	-1289 Jan 02 j 22:28	1°♊30'07		minimum elong	-1282 Jan 17 j 19:27	17°♊01'15	0°23'09
max. Earth dist.	-1289 Jan 03 j 08:19	1°♊31'04	31.05347 AU	max. Earth dist.	-1282 Jan 18 j 15:04	17°♊03'06	30.97661 AU
retrograde	-1289 Apr 18 j 14:17	4°♊02'09		retrograde	-1282 May 04 j 06:03	19°♊34'38	
opposition	-1289 Jul 08 j 10:42	2°♊37'54	0°07'13	min. Earth dist.	-1282 Jul 23 j 09:54	18°♊11'09	28.97247 AU
min. Earth dist.	-1289 Jul 07 j 18:48	2°♊38'59	29.04900 AU	opposition	-1282 Jul 24 j 05:38	18°♊09'48	0°-27'-10
direct	-1289 Sep 25 j 04:14	1°♊15'05		direct	-1282 Oct 10 j 13:33	16°♊46'50	
conjunction	-1288 Jan 05 j 03:38	3°♊42'42	0°04'34	conjunction	-1281 Jan 20 j 06:30	19°♊14'22	0°-27'-38
minimum elong	-1288 Jan 05 j 03:37	3°♊42'42	0°04'32	minimum elong	-1281 Jan 20 j 06:30	19°♊14'22	0°27'40
behind sun begin	-1288 Jan 04 j 21:19	3°♊42'08		max. Earth dist.	-1281 Jan 21 j 03:50	19°♊16'23	30.96803 AU
behind sun end	-1288 Jan 05 j 09:55	3°♊43'16		retrograde	-1281 May 06 j 18:37	21°♊47'52	
max. Earth dist.	-1288 Jan 05 j 20:20	3°♊44'16	31.04387 AU	opposition	-1281 Jul 26 j 18:16	20°♊23'00	0°-31'-59
retrograde	-1288 Apr 20 j 03:17	6°♊15'22		min. Earth dist.	-1281 Jul 25 j 21:12	20°♊24'27	28.96442 AU
opposition	-1288 Jul 09 j 23:50	4°♊51'04	0°02'17	direct	-1281 Oct 13 j 00:41	19°♊00'02	
min. Earth dist.	-1288 Jul 09 j 07:32	4°♊52'11	29.03876 AU				
direct	-1288 Sep 26 j 17:51	3°♊28'16		conjunction	-1280 Jan 22 j 17:29	21°♊27'36	0°-32'-8
desc. node	-1288 Dec 26 j 20:52	5°♊31'32		minimum elong	-1280 Jan 22 j 17:28	21°♊27'36	0°32'10
				max. Earth dist.	-1280 Jan 23 j 14:26	21°♊29'35	30.96049 AU
conjunction	-1287 Jan 06 j 14:03	5°♊55'52	0°00'-8	retrograde	-1280 May 08 j 09:02	24°♊01'15	
minimum elong	-1287 Jan 06 j 14:03	5°♊55'52	0°00'10	min. Earth dist.	-1280 Jul 27 j 09:55	22°♊37'49	28.95740 AU
behind sun begin	-1287 Jan 06 j 07:43	5°♊55'17		opposition	-1280 Jul 28 j 07:06	22°♊36'21	0°-36'-46
behind sun end	-1287 Jan 06 j 20:23	5°♊56'26		direct	-1280 Oct 14 j 10:32	21°♊13'24	
max. Earth dist.	-1287 Jan 07 j 06:14	5°♊57'23	31.03312 AU				
retrograde	-1287 Apr 22 j 17:55	8°♊28'40		conjunction	-1279 Jan 24 j 04:35	23°♊41'02	0°-36'-34
opposition	-1287 Jul 12 j 12:58	7°♊04'17	0°-2'-39	minimum elong	-1279 Jan 24 j 04:35	23°♊41'02	0°36'36
min. Earth dist.	-1287 Jul 11 j 19:50	7°♊05'27	29.02750 AU	max. Earth dist.	-1279 Jan 25 j 03:13	23°♊43'11	30.95370 AU
direct	-1287 Sep 29 j 05:30	5°♊41'27		retrograde	-1279 May 10 j 22:24	26°♊14'49	
				opposition	-1279 Jul 30 j 19:56	24°♊49'55	0°-41'-30
conjunction	-1286 Jan 09 j 00:44	8°♊09'02	0°-4'-49	min. Earth dist.	-1279 Jul 29 j 22:14	24°♊51'24	28.95083 AU
minimum elong	-1286 Jan 09 j 00:43	8°♊09'02	0°04'51	direct	-1279 Oct 16 j 23:05	23°♊27'00	
behind sun begin	-1286 Jan 08 j 18:27	8°♊08'28					
behind sun end	-1286 Jan 09 j 06:59	8°♊09'36		conjunction	-1278 Jan 26 j 15:54	25°♊54'42	0°-40'-58
max. Earth dist.	-1286 Jan 09 j 18:03	8°♊10'40	31.02138 AU	minimum elong	-1278 Jan 26 j 15:53	25°♊54'42	0°41'01
retrograde	-1286 Apr 25 j 04:46	10°♊41'58		max. Earth dist.	-1278 Jan 27 j 14:02	25°♊56'47	30.94733 AU
min. Earth dist.	-1286 Jul 14 j 09:07	9°♊18'37	29.01550 AU	retrograde	-1278 May 13 j 13:38	28°♊28'38	
opposition	-1286 Jul 15 j 02:04	9°♊17'28	0°-7'-35	min. Earth dist.	-1278 Aug 01 j 10:26	27°♊05'14	28.94451 AU
direct	-1286 Oct 01 j 17:39	7°♊54'36		opposition	-1278 Aug 02 j 08:43	27°♊03'42	0°-46'-10
				direct	-1278 Oct 19 j 09:54	25°♊40'48	
conjunction	-1285 Jan 11 j 11:20	10°♊22'09	0°-9'-24				
minimum elong	-1285 Jan 11 j 11:20	10°♊22'09	0°09'26	conjunction	-1277 Jan 29 j 03:29	28°♊08'35	0°-45'-19
behind sun begin	-1285 Jan 11 j 05:56	10°♊21'40		minimum elong	-1277 Jan 29 j 03:29	28°♊08'35	0°45'21
behind sun end	-1285 Jan 11 j 16:43	10°♊22'38		max. Earth dist.	-1277 Jan 30 j 02:30	28°♊10'45	30.94068 AU
max. Earth dist.	-1285 Jan 12 j 05:01	10°♊23'49	31.00937 AU		-1277 Mar 24 j 23:04	0°≈	
retrograde	-1285 Apr 27 j 17:35	12°♊55'11		retrograde	-1277 May 16 j 02:15	0°≈42'39	
opposition	-1285 Jul 17 j 14:59	11°♊30'35	0°-12'-31		-1277 Jul 09 j 03:02	30°♊♊	
min. Earth dist.	-1285 Jul 16 j 20:36	11°♊31'51	29.00351 AU	opposition	-1277 Aug 04 j 21:35	29°♊17'43	0°-50'-47
direct	-1285 Oct 04 j 05:43	10°♊07'41		min. Earth dist.	-1277 Aug 03 j 23:51	29°♊19'13	28.93758 AU
				direct	-1277 Oct 21 j 21:47	27°♊54'51	
conjunction	-1284 Jan 13 j 22:01	12°♊35'12	0°-13'-59		-1276 Jan 21 j 15:11	0°≈	
minimum elong	-1284 Jan 13 j 22:01	12°♊35'12	0°14'02				
behind sun begin	-1284 Jan 13 j 18:42	12°♊34'54		conjunction	-1276 Jan 31 j 15:12	0°≈22'41	0°-49'-35
behind sun end	-1284 Jan 14 j 01:19	12°♊35'30		minimum elong	-1276 Jan 31 j 15:12	0°≈22'40	0°49'37
max. Earth dist.	-1284 Jan 14 j 16:21	12°♊36'56	30.99745 AU	max. Earth dist.	-1276 Feb 01 j 14:00	0°≈24'50	30.93333 AU
retrograde	-1284 Apr 29 j 05:29	15°♊08'20		retrograde	-1276 May 17 j 16:59	2°≈56'52	
min. Earth dist.	-1284 Jul 18 j 09:51	13°♊44'53	28.99203 AU	min. Earth dist.	-1276 Aug 05 j 11:43	1°≈33'29	28.92974 AU
opposition	-1284 Jul 19 j 03:51	13°♊43'39	0°-17'-25	opposition	-1276 Aug 06 j 10:17	1°≈31'55	0°-55'-19
direct	-1284 Oct 05 j 16:16	12°♊20'43		direct	-1276 Oct 23 j 09:58	0°≈09'02	
conjunction	-1283 Jan 15 j 08:48	14°♊48'13	0°-18'-34	conjunction	-1275 Feb 02 j 03:02	2°≈36'56	0°-53'-47
minimum elong	-1283 Jan 15 j 08:48	14°♊48'13	0°18'36	minimum elong	-1275 Feb 02 j 03:02	2°≈36'56	0°53'49
max. Earth dist.	-1283 Jan 16 j 04:20	14°♊50'04	30.98649 AU	max. Earth dist.	-1275 Feb 03 j 01:47	2°≈39'05	30.92481 AU
retrograde	-1283 May 01 j 17:28	17°♊21'28		retrograde	-1275 May 20 j 06:01	5°≈11'14	

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 9

Attention, astronomical year style is used: The year -1275 in astronomical counting style is the year 1276 BCE in historical counting style.

opposition	-1275 Aug 08 j 23:14	3° \approx 46'14	0°-59'-46	min. Earth dist.	-1267 Aug 26 j 02:42	21° \approx 42'47	28.85575 AU
min. Earth dist.	-1275 Aug 08 j 01:40	3° \approx 47'44	28.92075 AU	opposition	-1267 Aug 27 j 02:49	21° \approx 41'06	-1°-31'-36
direct	-1275 Oct 25 j 20:57	2° \approx 23'20		direct	-1267 Nov 12 j 15:58	20° \approx 17'54	
conjunction	-1274 Feb 04 j 14:55	4° \approx 51'15	0°-57'-54	conjunction	-1266 Feb 22 j 16:14	22° \approx 46'14	-1°-27'-15
minimum elong	-1274 Feb 04 j 14:55	4° \approx 51'15	0°57'56	minimum elong	-1266 Feb 22 j 16:14	22° \approx 46'14	1°27'16
max. Earth dist.	-1274 Feb 05 j 14:08	4° \approx 53'27	30.91535 AU	max. Earth dist.	-1266 Feb 23 j 17:18	22° \approx 48'36	30.85275 AU
retrograde	-1274 May 22 j 18:27	7° \approx 25'39		retrograde	-1266 Jun 10 j 06:05	25° \approx 21'11	
opposition	-1274 Aug 11 j 11:56	6° \approx 00'35	-1°-4'-7	opposition	-1266 Aug 29 j 15:12	23° \approx 55'49	-1°-35'-1
min. Earth dist.	-1274 Aug 10 j 13:19	6° \approx 02'09	28.91081 AU	min. Earth dist.	-1266 Aug 28 j 16:10	23° \approx 57'25	28.85185 AU
direct	-1274 Oct 28 j 09:19	4° \approx 37'39		direct	-1266 Nov 15 j 03:14	22° \approx 32'37	
conjunction	-1273 Feb 07 j 02:51	7° \approx 05'35	-1°-1'-56	conjunction	-1265 Feb 25 j 05:04	25° \approx 01'03	-1°-30'-23
minimum elong	-1273 Feb 07 j 02:51	7° \approx 05'35	1°01'58	minimum elong	-1265 Feb 25 j 05:04	25° \approx 01'02	1°30'24
max. Earth dist.	-1273 Feb 08 j 01:24	7° \approx 07'43	30.90505 AU	max. Earth dist.	-1265 Feb 26 j 06:25	25° \approx 03'26	30.84898 AU
retrograde	-1273 May 25 j 06:45	9° \approx 40'03		retrograde	-1265 Jun 12 j 19:39	27° \approx 36'02	
min. Earth dist.	-1273 Aug 13 j 02:46	8° \approx 16'26	28.90048 AU	min. Earth dist.	-1265 Aug 31 j 03:26	26° \approx 12'21	28.84806 AU
opposition	-1273 Aug 14 j 00:31	8° \approx 14'55	-1°-8'-23	opposition	-1265 Sep 01 j 03:13	26° \approx 10'41	-1°-38'-18
direct	-1273 Oct 30 j 19:05	6° \approx 51'55		direct	-1265 Nov 17 j 15:26	24° \approx 47'29	
conjunction	-1272 Feb 09 j 14:56	9° \approx 19'54	-1°-5'-53	conjunction	-1264 Feb 27 j 17:54	27° \approx 16'00	-1°-33'-22
minimum elong	-1272 Feb 09 j 14:55	9° \approx 19'54	1°05'55	minimum elong	-1264 Feb 27 j 17:54	27° \approx 15'59	1°33'24
max. Earth dist.	-1272 Feb 10 j 14:42	9° \approx 22'09	30.89470 AU	max. Earth dist.	-1264 Feb 28 j 18:15	27° \approx 18'17	30.84492 AU
retrograde	-1272 May 26 j 19:11	11° \approx 54'25		retrograde	-1264 Jun 14 j 09:10	29° \approx 51'03	
opposition	-1272 Aug 15 j 12:59	10° \approx 29'13	-1°-12'-33	opposition	-1264 Sep 02 j 15:34	28° \approx 25'41	-1°-41'-25
min. Earth dist.	-1272 Aug 14 j 14:18	10° \approx 30'48	28.89030 AU	min. Earth dist.	-1264 Sep 01 j 17:00	28° \approx 27'16	28.84384 AU
direct	-1272 Nov 01 j 06:24	9° \approx 06'10		direct	-1264 Nov 19 j 01:40	27° \approx 02'28	
conjunction	-1271 Feb 11 j 02:44	11° \approx 34'10	-1°-9'-43	conjunction	-1263 Mar 01 j 06:56	29° \approx 31'03	-1°-36'-14
minimum elong	-1271 Feb 11 j 02:43	11° \approx 34'10	1°09'45	minimum elong	-1263 Mar 01 j 06:55	29° \approx 31'03	1°36'15
max. Earth dist.	-1271 Feb 12 j 01:52	11° \approx 36'21	30.88482 AU	max. Earth dist.	-1263 Mar 02 j 07:53	29° \approx 33'24	30.84027 AU
retrograde	-1271 May 29 j 08:49	14° \approx 08'46		retrograde	-1263 Mar 14 j 03:16	0° \approx	
min. Earth dist.	-1271 Aug 17 j 03:02	12° \approx 45'04	28.88101 AU	min. Earth dist.	-1263 Jun 16 j 22:00	2° \approx 06'08	
opposition	-1271 Aug 18 j 01:34	12° \approx 43'30	-1°-16'-36	opposition	-1263 Sep 04 j 04:50	0° \approx 42'22	28.83872 AU
direct	-1271 Nov 03 j 16:44	11° \approx 20'23		opposition	-1263 Sep 05 j 03:46	0° \approx 40'45	-1°-44'-24
conjunction	-1270 Feb 13 j 14:56	13° \approx 48'26	-1°-13'-27	direct	-1263 Sep 30 j 11:16	30° \approx	
minimum elong	-1270 Feb 13 j 14:56	13° \approx 48'26	1°13'29	direct	-1263 Nov 21 j 13:40	29° \approx 17'29	
max. Earth dist.	-1270 Feb 14 j 15:31	13° \approx 50'46	30.87595 AU	direct	-1262 Jan 10 j 20:29	0° \approx	
retrograde	-1270 Mar 18 j 09:24	15° \approx		conjunction	-1262 Mar 03 j 20:01	1° \approx 46'08	-1°-38'-56
retrograde	-1270 May 31 j 21:39	16° \approx 23'06		minimum elong	-1262 Mar 03 j 20:01	1° \approx 46'08	1°38'57
retrograde	-1270 Aug 19 j 06:00	15° \approx		max. Earth dist.	-1262 Mar 04 j 19:31	1° \approx 48'21	30.83471 AU
opposition	-1270 Aug 20 j 13:54	14° \approx 57'47	-1°-20'-32	retrograde	-1262 Jun 19 j 10:55	4° \approx 21'14	
min. Earth dist.	-1270 Aug 19 j 14:58	14° \approx 59'23	28.87278 AU	opposition	-1262 Sep 07 j 15:55	2° \approx 55'49	-1°-47'-13
direct	-1270 Nov 06 j 04:59	13° \approx 34'37		min. Earth dist.	-1262 Sep 06 j 17:56	2° \approx 57'21	28.83285 AU
direct	-1269 Jan 18 j 15:12	15° \approx		direct	-1262 Nov 24 j 00:09	1° \approx 32'29	
conjunction	-1269 Feb 16 j 03:06	16° \approx 02'44	-1°-17'-5	conjunction	-1261 Mar 06 j 09:21	4° \approx 01'11	-1°-41'-30
minimum elong	-1269 Feb 16 j 03:05	16° \approx 02'44	1°17'07	minimum elong	-1261 Mar 06 j 09:21	4° \approx 01'11	1°41'32
max. Earth dist.	-1269 Feb 17 j 03:03	16° \approx 05'00	30.86839 AU	max. Earth dist.	-1261 Mar 07 j 09:32	4° \approx 03'27	30.82844 AU
retrograde	-1269 Jun 03 j 12:15	18° \approx 37'28		retrograde	-1261 Jun 21 j 22:47	6° \approx 36'16	
min. Earth dist.	-1269 Aug 22 j 02:45	17° \approx 13'45	28.86595 AU	min. Earth dist.	-1261 Sep 09 j 06:14	5° \approx 12'20	28.82635 AU
opposition	-1269 Aug 23 j 02:15	17° \approx 12'07	-1°-24'-21	opposition	-1261 Sep 10 j 03:57	5° \approx 10'48	-1°-49'-52
direct	-1269 Nov 08 j 15:27	15° \approx 48'55		direct	-1261 Nov 26 j 12:14	3° \approx 47'24	
conjunction	-1268 Feb 18 j 15:23	18° \approx 17'07	-1°-20'-35	conjunction	-1260 Mar 07 j 22:25	6° \approx 16'08	-1°-43'-54
minimum elong	-1268 Feb 18 j 15:22	18° \approx 17'07	1°20'37	minimum elong	-1260 Mar 07 j 22:25	6° \approx 16'08	1°43'55
max. Earth dist.	-1268 Feb 19 j 16:20	18° \approx 19'28	30.86202 AU	max. Earth dist.	-1260 Mar 08 j 21:21	6° \approx 18'18	30.82193 AU
retrograde	-1268 Jun 05 j 01:14	20° \approx 51'55		retrograde	-1260 Jun 23 j 12:58	8° \approx 51'12	
opposition	-1268 Aug 24 j 14:34	19° \approx 26'32	-1°-28'-2	opposition	-1260 Sep 11 j 15:53	7° \approx 25'42	-1°-52'-21
min. Earth dist.	-1268 Aug 23 j 15:23	19° \approx 28'09	28.86025 AU	min. Earth dist.	-1260 Sep 10 j 18:10	7° \approx 27'14	28.82003 AU
direct	-1268 Nov 10 j 03:21	18° \approx 03'21		direct	-1260 Nov 27 j 22:50	6° \approx 02'12	
conjunction	-1267 Feb 20 j 03:46	20° \approx 31'36	-1°-23'-59	conjunction	-1259 Mar 10 j 11:42	8° \approx 31'01	-1°-46'-9
minimum elong	-1267 Feb 20 j 03:45	20° \approx 31'36	1°24'01	minimum elong	-1259 Mar 10 j 11:42	8° \approx 31'01	1°46'11
max. Earth dist.	-1267 Feb 21 j 04:39	20° \approx 33'57	30.85699 AU	max. Earth dist.	-1259 Mar 11 j 11:13	8° \approx 33'14	30.81575 AU
retrograde	-1267 Jun 07 j 17:00	23° \approx 06'28		retrograde	-1259 Jun 26 j 01:22	11° \approx 06'04	

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Attention, astronomical year style is used: The year -1259 in astronomical counting style is the year 1260 BCE in historical counting style.

min. Earth dist.	-1259 Sep 13 j 06:43	9° H 42'00	28.81430 AU	conjunction	-1250 Mar 31 j 14:36	28° H 47'20	-1°-58'-44
opposition	-1259 Sep 14 j 03:45	9° H 40'31	-1°-54'-40	minimum elong	-1250 Mar 31 j 14:36	28° H 47'20	1°58'45
direct	-1259 Nov 30 j 11:00	8° H 16'57		max. Earth dist.	-1250 Apr 01 j 11:01	28° H 49'15	30.80876 AU
					-1250 May 04 j 03:12	0° Y	
conjunction	-1258 Mar 13 j 00:58	10° H 45'49	-1°-48'-14	retrograde	-1250 Jul 17 j 01:00	1° Y 22'16	
minimum elong	-1258 Mar 13 j 00:58	10° H 45'49	1°48'15		-1250 Oct 02 j 17:51	30° R H	
max. Earth dist.	-1258 Mar 13 j 23:59	10° H 47'59	30.81059 AU	opposition	-1250 Oct 04 j 12:22	29° H 56'59	-2°-7'-17
retrograde	-1258 Jun 28 j 16:32	13° H 20'51		min. Earth dist.	-1250 Oct 03 j 18:54	29° H 58'14	28.81024 AU
opposition	-1258 Sep 16 j 15:29	11° H 55'17	-1°-56'-49	direct	-1250 Dec 20 j 17:57	28° H 33'14	
min. Earth dist.	-1258 Sep 15 j 17:48	11° H 56'48	28.80976 AU		-1249 Mar 05 j 09:10	0° Y	
direct	-1258 Dec 02 j 23:48	10° H 31'40					
				conjunction	-1249 Apr 03 j 04:47	1° Y 03'00	-1°-59'-15
conjunction	-1257 Mar 15 j 14:21	13° H 00'37	-1°-50'-9	minimum elong	-1249 Apr 03 j 04:47	1° Y 03'00	1°59'16
minimum elong	-1257 Mar 15 j 14:20	13° H 00'37	1°50'10	max. Earth dist.	-1249 Apr 03 j 23:44	1° Y 04'46	30.80862 AU
max. Earth dist.	-1257 Mar 16 j 13:21	13° H 02'47	30.80656 AU	retrograde	-1249 Jul 19 j 15:15	3° Y 37'50	
retrograde	-1257 Jul 01 j 04:59	15° H 35'38		opposition	-1249 Oct 06 j 23:42	2° Y 12'33	-2°-7'-43
min. Earth dist.	-1257 Sep 18 j 06:36	14° H 11'30	28.80654 AU	min. Earth dist.	-1249 Oct 06 j 06:15	2° Y 13'47	28.80974 AU
opposition	-1257 Sep 19 j 03:10	14° H 10'03	-1°-58'-46	direct	-1249 Dec 23 j 06:50	0° Y 48'44	
direct	-1257 Dec 05 j 11:10	12° H 46'24					
				conjunction	-1248 Apr 04 j 18:58	3° Y 18'33	-1°-59'-35
conjunction	-1256 Mar 17 j 03:47	15° H 15'26	-1°-51'-54	minimum elong	-1248 Apr 04 j 18:58	3° Y 18'33	1°59'35
minimum elong	-1256 Mar 17 j 03:47	15° H 15'26	1°51'55	max. Earth dist.	-1248 Apr 05 j 13:23	3° Y 20'17	30.80785 AU
max. Earth dist.	-1256 Mar 18 j 03:00	15° H 17'37	30.80417 AU	retrograde	-1248 Jul 21 j 03:16	5° Y 53'17	
retrograde	-1256 Jul 02 j 19:17	17° H 50'26		opposition	-1248 Oct 08 j 11:08	4° Y 28'00	-2°-7'-59
opposition	-1256 Sep 20 j 14:47	16° H 24'53	-2°00'-33	min. Earth dist.	-1248 Oct 07 j 19:20	4° Y 29'08	28.80892 AU
min. Earth dist.	-1256 Sep 19 j 17:16	16° H 26'24	28.80491 AU	direct	-1248 Dec 24 j 18:18	3° Y 04'06	
direct	-1256 Dec 06 j 23:38	15° H 01'13					
				conjunction	-1247 Apr 07 j 09:04	5° Y 33'58	-1°-59'-44
conjunction	-1255 Mar 19 j 17:04	17° H 30'21	-1°-53'-29	minimum elong	-1247 Apr 07 j 09:04	5° Y 33'58	1°59'45
minimum elong	-1255 Mar 19 j 17:04	17° H 30'21	1°53'30	max. Earth dist.	-1247 Apr 08 j 03:01	5° Y 35'39	30.80718 AU
max. Earth dist.	-1255 Mar 20 j 15:33	17° H 32'28	30.80323 AU	retrograde	-1247 Jul 23 j 17:40	8° Y 08'35	
retrograde	-1255 Jul 05 j 09:20	20° H 05'22		opposition	-1247 Oct 10 j 22:20	6° Y 43'18	-2°-8'-2
min. Earth dist.	-1255 Sep 22 j 06:06	18° H 41'17	28.80477 AU	min. Earth dist.	-1247 Oct 10 j 06:10	6° Y 44'26	28.80833 AU
opposition	-1255 Sep 23 j 02:33	18° H 39'50	-2°-2'-9	direct	-1247 Dec 27 j 07:59	5° Y 19'18	
direct	-1255 Dec 09 j 10:10	17° H 16'10					
				conjunction	-1246 Apr 09 j 23:16	7° Y 49'14	-1°-59'-42
conjunction	-1254 Mar 22 j 06:48	19° H 45'25	-1°-54'-54	minimum elong	-1246 Apr 09 j 23:16	7° Y 49'14	1°59'42
minimum elong	-1254 Mar 22 j 06:48	19° H 45'25	1°54'54	max. Earth dist.	-1246 Apr 10 j 16:02	7° Y 50'48	30.80683 AU
max. Earth dist.	-1254 Mar 23 j 05:57	19° H 47'36	30.80373 AU	retrograde	-1246 Jul 26 j 07:04	10° Y 23'43	
retrograde	-1254 Jul 07 j 22:14	22° H 20'25		opposition	-1246 Oct 13 j 09:29	8° Y 58'26	-2°-7'-54
opposition	-1254 Sep 25 j 13:59	20° H 54'58	-2°-3'-34	min. Earth dist.	-1246 Oct 12 j 18:48	8° Y 59'28	28.80846 AU
min. Earth dist.	-1254 Sep 24 j 17:09	20° H 56'26	28.80571 AU	direct	-1246 Dec 29 j 19:52	7° Y 34'22	
direct	-1254 Dec 11 j 22:06	19° H 31'18					
				conjunction	-1245 Apr 12 j 13:35	10° Y 04'21	-1°-59'-28
conjunction	-1253 Mar 24 j 20:31	22° H 00'39	-1°-56'-7	minimum elong	-1245 Apr 12 j 13:35	10° Y 04'21	1°59'30
minimum elong	-1253 Mar 24 j 20:31	22° H 00'39	1°56'09	max. Earth dist.	-1245 Apr 13 j 06:36	10° Y 05'56	30.80749 AU
max. Earth dist.	-1253 Mar 25 j 18:14	22° H 02'42	30.80507 AU	retrograde	-1245 Jul 28 j 19:36	12° Y 38'43	
retrograde	-1253 Jul 10 j 11:06	24° H 35'40		opposition	-1245 Oct 15 j 20:33	11° Y 13'26	-2°-7'-34
min. Earth dist.	-1253 Sep 27 j 05:50	23° H 11'40	28.80738 AU	min. Earth dist.	-1245 Oct 15 j 05:33	11° Y 14'30	28.80963 AU
opposition	-1253 Sep 28 j 01:39	23° H 10'16	-2°-4'-47	direct	-1244 Jan 01 j 09:03	9° Y 49'19	
direct	-1253 Dec 14 j 08:14	21° H 46'37					
				conjunction	-1244 Apr 14 j 03:34	12° Y 19'21	-1°-59'-5
conjunction	-1252 Mar 26 j 10:23	24° H 16'05	-1°-57'-11	minimum elong	-1244 Apr 14 j 03:34	12° Y 19'21	1°59'05
minimum elong	-1252 Mar 26 j 10:23	24° H 16'05	1°57'11	max. Earth dist.	-1244 Apr 14 j 19:08	12° Y 20'48	30.80934 AU
max. Earth dist.	-1252 Mar 27 j 08:44	24° H 18'11	30.80673 AU	retrograde	-1244 Jul 30 j 08:29	14° Y 53'37	
retrograde	-1252 Jul 11 j 23:04	26° H 51'06		opposition	-1244 Oct 17 j 07:42	13° Y 28'21	-2°-7'-3
opposition	-1252 Sep 29 j 13:13	25° H 25'45	-2°-5'-48	min. Earth dist.	-1244 Oct 16 j 17:36	13° Y 29'21	28.81227 AU
min. Earth dist.	-1252 Sep 28 j 17:54	25° H 27'07	28.80893 AU	direct	-1243 Jan 02 j 19:41	12° Y 04'11	
direct	-1252 Dec 15 j 19:32	24° H 02'05					
				conjunction	-1243 Apr 16 j 17:55	14° Y 34'18	-1°-58'-30
conjunction	-1251 Mar 29 j 00:22	26° H 31'41	-1°-58'-3	minimum elong	-1243 Apr 16 j 17:55	14° Y 34'18	1°58'31
minimum elong	-1251 Mar 29 j 00:22	26° H 31'40	1°58'04	max. Earth dist.	-1243 Apr 17 j 10:08	14° Y 35'49	30.81269 AU
max. Earth dist.	-1251 Mar 29 j 20:53	26° H 33'36	30.80813 AU	retrograde	-1243 Aug 01 j 20:30	17° Y 08'27	
retrograde	-1251 Jul 14 j 13:25	29° H 06'39		opposition	-1243 Oct 19 j 18:39	15° Y 43'15	-2°-6'-19
min. Earth dist.	-1251 Oct 01 j 06:01	27° H 42'41	28.81008 AU	min. Earth dist.	-1243 Oct 19 j 04:55	15° Y 44'14	28.81628 AU
opposition	-1251 Oct 02 j 00:47	27° H 41'22	-2°-6'-38	direct	-1242 Jan 05 j 07:28	14° Y 19'04	
direct	-1251 Dec 18 j 05:31	26° H 17'39					

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Attention, astronomical year style is used: The year -1242 in astronomical counting style is the year 1243 BCE in historical counting style.

conjunction	-1242 Apr 19 j 08:11	16° Υ 49'16	-1°-57'-44	conjunction	-1234 May 08 j 04:38	4° 8 51'05	-1°-45'-15
minimum elong	-1242 Apr 19 j 08:11	16° Υ 49'16	1°57'44	minimum elong	-1234 May 08 j 04:38	4° 8 51'05	1°45'15
max. Earth dist.	-1242 Apr 19 j 22:42	16° Υ 50'37	30.81750 AU	max. Earth dist.	-1234 May 08 j 12:03	4° 8 51'46	30.85747 AU
retrograde	-1242 Aug 04 j 09:45	19° Υ 23'20		retrograde	-1234 Aug 22 j 15:21	7° 8 24'08	
opposition	-1242 Oct 22 j 05:40	17° Υ 58'12	-2°-5'-24	opposition	-1234 Nov 08 j 20:37	5° 8 59'30	-1°-51'-19
min. Earth dist.	-1242 Oct 21 j 16:16	17° Υ 59'09	28.82169 AU	min. Earth dist.	-1234 Nov 08 j 14:51	5° 8 59'55	28.86021 AU
direct	-1241 Jan 07 j 17:46	16° Υ 33'59		direct	-1233 Jan 25 j 20:09	4° 8 34'59	
conjunction	-1241 Apr 21 j 22:36	19° Υ 04'18	-1°-56'-47	conjunction	-1233 May 10 j 18:55	7° 8 05'56	-1°-42'-57
minimum elong	-1241 Apr 21 j 22:36	19° Υ 04'18	1°56'48	minimum elong	-1233 May 10 j 18:56	7° 8 05'56	1°42'57
max. Earth dist.	-1241 Apr 22 j 13:23	19° Υ 05'40	30.82334 AU	max. Earth dist.	-1233 May 11 j 00:24	7° 8 06'26	30.86120 AU
retrograde	-1241 Aug 06 j 20:34	21° Υ 38'16		retrograde	-1233 Aug 25 j 03:11	9° 8 38'49	
opposition	-1241 Oct 24 j 16:37	20° Υ 13'14	-2°-4'-17	opposition	-1233 Nov 11 j 07:09	8° 8 14'13	-1°-48'-47
min. Earth dist.	-1241 Oct 24 j 04:25	20° Υ 14'07	28.82785 AU	min. Earth dist.	-1233 Nov 11 j 01:51	8° 8 14'35	28.86437 AU
direct	-1240 Jan 10 j 05:25	18° Υ 49'02		direct	-1232 Jan 28 j 07:18	6° 8 49'37	
conjunction	-1240 Apr 23 j 13:01	21° Υ 19'27	-1°-55'-39	conjunction	-1232 May 12 j 09:20	9° 8 20'37	-1°-40'-30
minimum elong	-1240 Apr 23 j 13:01	21° Υ 19'27	1°55'39	minimum elong	-1232 May 12 j 09:20	9° 8 20'37	1°40'29
max. Earth dist.	-1240 Apr 24 j 02:14	21° Υ 20'41	30.82990 AU	max. Earth dist.	-1232 May 12 j 15:04	9° 8 21'09	30.86583 AU
retrograde	-1240 Aug 08 j 10:29	23° Υ 53'21		retrograde	-1232 Aug 26 j 12:55	11° 8 53'19	
opposition	-1240 Oct 26 j 03:31	22° Υ 28'25	-2°-2'-59	opposition	-1232 Nov 12 j 17:41	10° 8 28'46	-1°-46'-4
min. Earth dist.	-1240 Oct 25 j 15:23	22° Υ 29'16	28.83444 AU	min. Earth dist.	-1232 Nov 12 j 13:29	10° 8 29'03	28.86957 AU
direct	-1239 Jan 11 j 17:11	21° Υ 04'12		direct	-1231 Jan 29 j 19:05	9° 8 04'07	
conjunction	-1239 Apr 26 j 03:32	23° Υ 34'45	-1°-54'-20	conjunction	-1231 May 14 j 23:34	11° 8 35'09	-1°-37'-53
minimum elong	-1239 Apr 26 j 03:32	23° Υ 34'45	1°54'21	minimum elong	-1231 May 14 j 23:34	11° 8 35'09	1°37'54
max. Earth dist.	-1239 Apr 26 j 16:09	23° Υ 35'55	30.83630 AU	max. Earth dist.	-1231 May 15 j 03:44	11° 8 35'32	30.87185 AU
retrograde	-1239 Aug 10 j 22:19	26° Υ 08'33		retrograde	-1231 Aug 29 j 01:51	14° 8 07'41	
opposition	-1239 Oct 28 j 14:35	24° Υ 43'42	-2°-1'-29	opposition	-1231 Nov 15 j 04:07	12° 8 43'11	-1°-43'-12
min. Earth dist.	-1239 Oct 28 j 04:27	24° Υ 44'25	28.84055 AU	min. Earth dist.	-1231 Nov 14 j 23:43	12° 8 43'30	28.87622 AU
direct	-1238 Jan 14 j 04:09	23° Υ 19'29		direct	-1230 Feb 01 j 06:18	11° 8 18'29	
conjunction	-1238 Apr 28 j 18:16	25° Υ 50'07	-1°-52'-51	conjunction	-1230 May 17 j 13:58	13° 8 49'35	-1°-35'-8
minimum elong	-1238 Apr 28 j 18:16	25° Υ 50'07	1°52'51	minimum elong	-1230 May 17 j 13:58	13° 8 49'35	1°35'07
max. Earth dist.	-1238 Apr 29 j 05:39	25° Υ 51'11	30.84210 AU	max. Earth dist.	-1230 May 17 j 17:57	13° 8 49'57	30.87919 AU
retrograde	-1238 Aug 13 j 12:28	28° Υ 23'49			-1230 Jun 19 j 06:23	15° 8	
opposition	-1238 Oct 31 j 01:24	26° Υ 59'02	-1°-59'-48	retrograde	-1230 Aug 31 j 11:54	16° 8 21'58	
min. Earth dist.	-1238 Oct 30 j 15:22	26° Υ 59'45	28.84579 AU		-1230 Nov 16 j 03:57	15° 8	
direct	-1237 Jan 16 j 17:55	25° Υ 34'46		opposition	-1230 Nov 17 j 14:35	14° 8 57'32	-1°-40'-11
conjunction	-1237 May 01 j 08:56	28° Υ 05'31	-1°-51'-12	min. Earth dist.	-1230 Nov 17 j 11:46	14° 8 57'44	28.88426 AU
minimum elong	-1237 May 01 j 08:56	28° Υ 05'31	1°51'13	direct	-1229 Feb 03 j 16:35	13° 8 32'48	
max. Earth dist.	-1237 May 01 j 18:40	28° Υ 06'25	30.84683 AU		-1229 Apr 20 j 15:17	15° 8	
retrograde	-1237 Jun 27 j 19:12	0° 8		conjunction	-1229 May 20 j 04:18	16° 8 03'59	-1°-32'-14
	-1237 Aug 16 j 01:26	0° 8 39'05		minimum elong	-1229 May 20 j 04:18	16° 8 03'59	1°32'15
	-1237 Oct 05 j 04:58	30° 8 Υ		max. Earth dist.	-1229 May 20 j 07:25	16° 8 04'16	30.88806 AU
opposition	-1237 Nov 02 j 12:27	29° Υ 14'20	-1°-57'-56	retrograde	-1229 Sep 03 j 00:22	18° 8 36'12	
min. Earth dist.	-1237 Nov 02 j 04:20	29° Υ 14'55	28.85006 AU	opposition	-1229 Nov 20 j 00:59	17° 8 11'52	-1°-37'00
direct	-1236 Jan 19 j 06:09	27° Υ 50'02		min. Earth dist.	-1229 Nov 19 j 21:52	17° 8 12'05	28.89358 AU
	-1236 Apr 23 j 15:35	0° 8		direct	-1228 Feb 06 j 06:14	15° 8 47'08	
conjunction	-1236 May 02 j 23:28	0° 8 20'50	-1°-49'-23	conjunction	-1228 May 21 j 18:27	18° 8 18'23	-1°-29'-12
minimum elong	-1236 May 02 j 23:28	0° 8 20'50	1°49'22	minimum elong	-1228 May 21 j 18:27	18° 8 18'23	1°29'11
max. Earth dist.	-1236 May 03 j 08:46	0° 8 21'42	30.85078 AU	max. Earth dist.	-1228 May 21 j 20:34	18° 8 18'35	30.89784 AU
retrograde	-1236 Aug 17 j 14:05	2° 8 54'15		retrograde	-1228 Sep 04 j 12:04	20° 8 50'28	
opposition	-1236 Nov 03 j 23:16	1° 8 29'33	-1°-55'-54	opposition	-1228 Nov 21 j 11:31	19° 8 26'14	-1°-33'-41
min. Earth dist.	-1236 Nov 03 j 15:20	1° 8 30'07	28.85355 AU	min. Earth dist.	-1228 Nov 21 j 10:07	19° 8 26'20	28.90367 AU
direct	-1235 Jan 20 j 19:55	0° 8 05'11		direct	-1227 Feb 07 j 17:43	18° 8 01'29	
conjunction	-1235 May 05 j 13:58	2° 8 36'02	-1°-47'-23	conjunction	-1227 May 24 j 08:54	20° 8 32'49	-1°-26'-1
minimum elong	-1235 May 05 j 13:59	2° 8 36'02	1°47'25	minimum elong	-1227 May 24 j 08:55	20° 8 32'49	1°26'02
max. Earth dist.	-1235 May 05 j 21:15	2° 8 36'43	30.85413 AU	max. Earth dist.	-1227 May 24 j 10:31	20° 8 32'58	30.90812 AU
retrograde	-1235 Aug 20 j 03:15	5° 8 09'17		retrograde	-1227 Sep 07 j 00:41	23° 8 04'45	
opposition	-1235 Nov 06 j 09:57	3° 8 44'37	-1°-53'-42	opposition	-1227 Nov 23 j 21:48	21° 8 40'37	-1°-30'-13
min. Earth dist.	-1235 Nov 06 j 03:29	3° 8 45'04	28.85685 AU	min. Earth dist.	-1227 Nov 23 j 20:42	21° 8 40'42	28.91373 AU
direct	-1234 Jan 23 j 07:18	2° 8 20'10		direct	-1226 Feb 10 j 07:00	20° 8 15'52	

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Attention, astronomical year style is used: The year -1226 in astronomical counting style is the year 1227 BCE in historical counting style.

conjunction	-1226 May 26 j 23:19	22° 8 47'16	-1°-22'-43	conjunction	-1218 Jun 14 j 15:53	10° II 38'04	0°-52'-24
minimum elong	-1226 May 26 j 23:20	22° 8 47'16	1°22'42	minimum elong	-1218 Jun 14 j 15:53	10° II 38'04	0°52'24
max. Earth dist.	-1226 May 26 j 22:49	22° 8 47'13	30.91799 AU	max. Earth dist.	-1218 Jun 14 j 08:22	10° II 37'23	30.98301 AU
retrograde	-1226 Sep 09 j 13:55	25° 8 19'03		retrograde	-1218 Sep 27 j 06:32	13° II 08'19	
opposition	-1226 Nov 26 j 08:21	23° 8 54'59	-1°-26'-37	opposition	-1218 Dec 13 j 18:32	11° II 44'45	0°-53'-48
min. Earth dist.	-1226 Nov 26 j 08:47	23° 8 54'58	28.92332 AU	min. Earth dist.	-1218 Dec 14 j 01:03	11° II 44'18	28.98867 AU
direct	-1225 Feb 12 j 18:49	22° 8 30'13		direct	-1217 Mar 02 j 20:01	10° II 19'36	
conjunction	-1225 May 29 j 13:43	25° 8 01'41	-1°-19'-17	conjunction	-1217 Jun 17 j 05:21	12° II 51'18	0°-48'-13
minimum elong	-1225 May 29 j 13:43	25° 8 01'41	1°19'17	minimum elong	-1217 Jun 17 j 05:21	12° II 51'18	0°48'13
max. Earth dist.	-1225 May 29 j 13:03	25° 8 01'37	30.92712 AU	max. Earth dist.	-1217 Jun 16 j 20:27	12° II 50'29	30.99420 AU
retrograde	-1225 Sep 12 j 01:42	27° 8 33'16		retrograde	-1217 Sep 29 j 19:04	15° II 21'25	
opposition	-1225 Nov 28 j 18:49	26° 8 09'18	-1°-22'-53	opposition	-1217 Dec 16 j 04:46	13° II 57'56	0°-49'-17
min. Earth dist.	-1225 Nov 28 j 20:13	26° 8 09'12	28.93188 AU	min. Earth dist.	-1217 Dec 16 j 12:11	13° II 57'25	29.00058 AU
direct	-1224 Feb 15 j 08:28	24° 8 44'29		direct	-1216 Mar 04 j 07:47	12° II 32'48	
conjunction	-1224 May 31 j 03:57	27° 8 15'59	-1°-15'-44	conjunction	-1216 Jun 18 j 19:01	15° II 04'34	0°-43'-57
minimum elong	-1224 May 31 j 03:58	27° 8 15'59	1°15'44	minimum elong	-1216 Jun 18 j 19:01	15° II 04'34	0°43'57
max. Earth dist.	-1224 May 31 j 00:56	27° 8 15'42	30.93536 AU	max. Earth dist.	-1216 Jun 18 j 10:30	15° II 03'46	31.00671 AU
retrograde	-1224 Sep 13 j 13:46	29° 8 47'23		retrograde	-1216 Oct 01 j 06:25	17° II 34'31	
opposition	-1224 Nov 30 j 05:10	28° 8 23'28	-1°-19'-2	opposition	-1216 Dec 17 j 14:50	16° II 11'10	0°-44'-41
min. Earth dist.	-1224 Nov 30 j 07:23	28° 8 23'19	28.93974 AU	min. Earth dist.	-1216 Dec 17 j 22:57	16° II 10'35	29.01338 AU
direct	-1223 Feb 16 j 20:10	26° 8 58'36		direct	-1215 Mar 06 j 21:19	14° II 46'03	
conjunction	-1223 Jun 02 j 18:18	29° 8 30'08	-1°-12'-5	conjunction	-1215 Jun 21 j 08:34	17° II 17'53	0°-39'-37
minimum elong	-1223 Jun 02 j 18:18	29° 8 30'08	1°12'06	minimum elong	-1215 Jun 21 j 08:34	17° II 17'53	0°39'38
max. Earth dist.	-1223 Jun 02 j 15:08	29° 8 29'50	30.94286 AU	max. Earth dist.	-1215 Jun 20 j 22:07	17° II 16'55	31.01985 AU
	-1223 Jun 16 j 05:25	0° II		retrograde	-1215 Oct 03 j 18:35	19° II 47'42	
retrograde	-1223 Sep 15 j 23:52	2° II 01'20		opposition	-1215 Dec 20 j 01:01	18° II 24'28	0°-40'-2
opposition	-1223 Dec 02 j 15:34	0° II 37'28	-1°-15'-5	min. Earth dist.	-1215 Dec 20 j 09:41	18° II 23'51	29.02660 AU
min. Earth dist.	-1223 Dec 02 j 19:19	0° II 37'12	28.94686 AU	direct	-1214 Mar 09 j 08:45	16° II 59'22	
	-1223 Dec 25 j 10:51	30° R 8		conjunction	-1214 Jun 23 j 22:17	19° II 31'16	0°-35'-14
direct	-1222 Feb 19 j 08:28	29° 8 12'32		minimum elong	-1214 Jun 23 j 22:17	19° II 31'16	0°35'13
	-1222 Apr 14 j 23:54	0° II		max. Earth dist.	-1214 Jun 23 j 11:57	19° II 30'19	31.03287 AU
conjunction	-1222 Jun 05 j 08:25	1° II 44'05	-1°-8'-20	retrograde	-1214 Oct 06 j 05:13	22° II 00'56	
minimum elong	-1222 Jun 05 j 08:25	1° II 44'05	1°08'19	opposition	-1214 Dec 22 j 11:19	20° II 37'49	0°-35'-19
max. Earth dist.	-1222 Jun 05 j 03:12	1° II 43'36	30.94994 AU	min. Earth dist.	-1214 Dec 22 j 21:30	20° II 37'06	29.03933 AU
retrograde	-1222 Sep 18 j 12:15	4° II 15'05		direct	-1213 Mar 11 j 21:09	19° II 12'45	
opposition	-1222 Dec 05 j 01:44	2° II 51'16	-1°-11'-1	conjunction	-1213 Jun 26 j 11:47	21° II 44'41	0°-30'-48
min. Earth dist.	-1222 Dec 05 j 05:35	2° II 50'59	28.95384 AU	minimum elong	-1213 Jun 26 j 11:47	21° II 44'41	0°30'48
direct	-1221 Feb 21 j 20:01	1° II 26'16		max. Earth dist.	-1213 Jun 25 j 23:23	21° II 43'32	31.04530 AU
conjunction	-1221 Jun 07 j 22:31	3° II 57'50	-1°-4'-29	retrograde	-1213 Oct 08 j 17:56	24° II 14'11	
minimum elong	-1221 Jun 07 j 22:31	3° II 57'50	1°04'29	opposition	-1213 Dec 24 j 21:35	22° II 51'10	0°-30'-33
max. Earth dist.	-1221 Jun 07 j 17:01	3° II 57'20	30.95698 AU	min. Earth dist.	-1213 Dec 25 j 07:50	22° II 50'27	29.05131 AU
retrograde	-1221 Sep 20 j 21:23	6° II 28'38		direct	-1212 Mar 13 j 08:47	21° II 26'05	
opposition	-1221 Dec 07 j 12:04	5° II 04'52	-1°-6'-51	conjunction	-1212 Jun 28 j 01:17	23° II 58'02	0°-26'-19
min. Earth dist.	-1221 Dec 07 j 17:39	5° II 04'28	28.96108 AU	minimum elong	-1212 Jun 28 j 01:17	23° II 58'02	0°26'19
direct	-1220 Feb 24 j 06:40	3° II 39'49		max. Earth dist.	-1212 Jun 27 j 12:30	23° II 56'51	31.05668 AU
conjunction	-1220 Jun 09 j 12:14	6° II 11'24	-1°00'-32	retrograde	-1212 Oct 10 j 02:37	26° II 27'22	
minimum elong	-1220 Jun 09 j 12:15	6° II 11'24	1°00'32	opposition	-1212 Dec 26 j 08:01	25° II 04'26	0°-25'-44
max. Earth dist.	-1220 Jun 09 j 05:45	6° II 10'48	30.96465 AU	min. Earth dist.	-1212 Dec 26 j 20:14	25° II 03'34	29.06214 AU
retrograde	-1220 Sep 22 j 08:33	8° II 42'00		direct	-1211 Mar 15 j 19:50	23° II 39'20	
opposition	-1220 Dec 08 j 22:12	7° II 18'17	-1°-2'-35	conjunction	-1211 Jun 30 j 14:45	26° II 11'17	0°-21'-49
min. Earth dist.	-1220 Dec 09 j 03:28	7° II 17'55	28.96907 AU	minimum elong	-1211 Jun 30 j 14:46	26° II 11'17	0°21'49
direct	-1219 Feb 25 j 20:07	5° II 53'10		max. Earth dist.	-1211 Jun 30 j 00:30	26° II 09'58	31.06705 AU
conjunction	-1219 Jun 12 j 02:05	8° II 24'48	0°-56'-31	retrograde	-1211 Oct 12 j 13:03	28° II 40'25	
minimum elong	-1219 Jun 12 j 02:05	8° II 24'48	0°56'31	opposition	-1211 Dec 28 j 18:09	27° II 17'33	0°-20'-54
max. Earth dist.	-1219 Jun 11 j 18:48	8° II 24'07	30.97313 AU	min. Earth dist.	-1211 Dec 29 j 06:23	27° II 16'41	29.07191 AU
retrograde	-1219 Sep 24 j 19:00	10° II 55'13		direct	-1210 Mar 18 j 08:49	25° II 52'24	
opposition	-1219 Dec 11 j 08:22	9° II 31'34	0°-58'-14	conjunction	-1210 Jul 03 j 04:10	28° II 24'20	0°-17'-17
min. Earth dist.	-1219 Dec 11 j 15:06	9° II 31'05	28.97822 AU	minimum elong	-1210 Jul 03 j 04:10	28° II 24'20	0°17'17
direct	-1218 Feb 28 j 07:04	8° II 06'25		max. Earth dist.	-1210 Jul 02 j 12:55	28° II 22'56	31.07635 AU

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Attention, astronomical year style is used: The year -1210 in astronomical counting style is the year 1211 BCE in historical counting style.

	-1210 Aug 18 j 14:20	0°☾		direct	-1203 Apr 02 j 22:36	11°☾18'17	
retrograde	-1210 Oct 14 j 22:58	0°☾53'18					
	-1210 Dec 13 j 06:32	30°♊II		conjunction	-1203 Jul 18 j 21:39	13°☾50'09	0°14'45
opposition	-1210 Dec 31 j 04:32	29°♊30'28	0°-16'-2	minimum elong	-1203 Jul 18 j 21:39	13°☾50'09	0°14'46
min. Earth dist.	-1210 Dec 31 j 18:28	29°♊29'29	29.08094 AU	behind sun begin	-1203 Jul 18 j 19:12	13°☾49'56	
direct	-1209 Mar 20 j 19:04	28°♊05'15		behind sun end	-1203 Jul 19 j 00:07	13°☾50'22	
	-1209 Jun 18 j 20:28	0°☾		max. Earth dist.	-1203 Jul 18 j 02:59	13°☾48'26	31.14679 AU
				retrograde	-1203 Oct 30 j 01:00	16°☾17'59	
conjunction	-1209 Jul 05 j 17:14	0°☾37'10	0°-12'-44	opposition	-1202 Jan 15 j 04:11	14°☾55'34	0°18'07
minimum elong	-1209 Jul 05 j 17:14	0°☾37'10	0°12'44	min. Earth dist.	-1202 Jan 15 j 21:41	14°☾54'21	29.15323 AU
behind sun begin	-1209 Jul 05 j 13:12	0°☾36'49		direct	-1202 Apr 05 j 09:30	13°☾30'17	
behind sun end	-1209 Jul 05 j 21:16	0°☾37'32					
max. Earth dist.	-1209 Jul 05 j 01:33	0°☾35'44	31.08514 AU	conjunction	-1202 Jul 21 j 10:07	16°☾02'11	0°19'17
retrograde	-1209 Oct 17 j 09:07	3°☾05'56		minimum elong	-1202 Jul 21 j 10:07	16°☾02'11	0°19'18
opposition	-1208 Jan 02 j 14:45	1°☾43'08	0°-11'-10	max. Earth dist.	-1202 Jul 20 j 14:30	16°☾00'22	31.15927 AU
min. Earth dist.	-1208 Jan 03 j 04:42	1°☾42'09	29.08949 AU	retrograde	-1202 Nov 01 j 11:37	18°☾29'55	
direct	-1208 Mar 22 j 08:29	0°☾17'53		opposition	-1201 Jan 17 j 14:34	17°☾07'36	0°22'56
				min. Earth dist.	-1201 Jan 18 j 07:45	17°☾06'24	29.16546 AU
conjunction	-1208 Jul 07 j 06:13	2°☾49'46	0°-8'-10	direct	-1201 Apr 07 j 21:38	15°☾42'22	
minimum elong	-1208 Jul 07 j 06:13	2°☾49'46	0°08'10				
behind sun begin	-1208 Jul 07 j 00:24	2°☾49'15		conjunction	-1201 Jul 23 j 22:25	18°☾14'17	0°23'46
behind sun end	-1208 Jul 07 j 12:02	2°☾50'17		minimum elong	-1201 Jul 23 j 22:25	18°☾14'17	0°23'47
max. Earth dist.	-1208 Jul 06 j 13:04	2°☾48'11	31.09366 AU	max. Earth dist.	-1201 Jul 23 j 02:13	18°☾12'24	31.17104 AU
retrograde	-1208 Oct 18 j 20:12	5°☾18'20		retrograde	-1201 Nov 03 j 21:33	20°☾41'56	
opposition	-1207 Jan 04 j 00:52	3°☾55'33	0°-6'-16	opposition	-1200 Jan 20 j 01:05	19°☾19'42	0°27'44
min. Earth dist.	-1207 Jan 04 j 15:50	3°☾54'30	29.09820 AU	min. Earth dist.	-1200 Jan 20 j 19:46	19°☾18'24	29.17691 AU
direct	-1207 Mar 24 j 20:21	2°☾30'15		direct	-1200 Apr 09 j 07:02	17°☾54'29	
conjunction	-1207 Jul 09 j 19:12	5°☾02'06	0°-3'-37	conjunction	-1200 Jul 25 j 10:48	20°☾26'24	0°28'14
minimum elong	-1207 Jul 09 j 19:13	5°☾02'06	0°03'37	minimum elong	-1200 Jul 25 j 10:48	20°☾26'24	0°28'15
behind sun begin	-1207 Jul 09 j 12:41	5°☾01'32		max. Earth dist.	-1200 Jul 24 j 14:10	20°☾24'29	31.18189 AU
behind sun end	-1207 Jul 10 j 01:44	5°☾02'41		retrograde	-1200 Nov 05 j 07:27	22°☾53'56	
max. Earth dist.	-1207 Jul 09 j 02:28	5°☾00'34	31.10254 AU	opposition	-1199 Jan 21 j 11:28	21°☾31'47	0°32'28
retrograde	-1207 Oct 21 j 06:15	7°☾30'30		min. Earth dist.	-1199 Jan 22 j 06:16	21°☾30'29	29.18705 AU
opposition	-1206 Jan 06 j 11:08	6°☾07'45	0°-1'-23	direct	-1199 Apr 11 j 20:01	20°☾06'35	
min. Earth dist.	-1206 Jan 07 j 02:37	6°☾06'40	29.10731 AU				
direct	-1206 Mar 27 j 10:08	4°☾42'24		conjunction	-1199 Jul 27 j 23:07	22°☾38'29	0°32'39
asc. node	-1206 Apr 21 j 01:50	4°☾52'19		minimum elong	-1199 Jul 27 j 23:07	22°☾38'29	0°32'40
				max. Earth dist.	-1199 Jul 27 j 00:55	22°☾36'26	31.19133 AU
conjunction	-1206 Jul 12 j 07:52	7°☾14'15	0°01'04	retrograde	-1199 Nov 07 j 18:32	25°☾05'55	
minimum elong	-1206 Jul 12 j 07:51	7°☾14'15	0°01'05	opposition	-1198 Jan 23 j 22:02	23°☾43'49	0°37'10
behind sun begin	-1206 Jul 12 j 01:17	7°☾13'40		min. Earth dist.	-1198 Jan 24 j 17:49	23°☾42'26	29.19597 AU
behind sun end	-1206 Jul 12 j 14:26	7°☾14'49		direct	-1198 Apr 14 j 07:21	22°☾18'36	
max. Earth dist.	-1206 Jul 11 j 13:37	7°☾12'34	31.11207 AU				
retrograde	-1206 Oct 23 j 17:51	9°☾42'28		conjunction	-1198 Jul 30 j 11:18	24°☾50'30	0°37'01
opposition	-1205 Jan 08 j 21:21	8°☾19'46	0°03'30	minimum elong	-1198 Jul 30 j 11:18	24°☾50'30	0°37'01
min. Earth dist.	-1205 Jan 09 j 12:48	8°☾18'41	29.11743 AU	max. Earth dist.	-1198 Jul 29 j 13:24	24°☾48'28	31.19954 AU
direct	-1205 Mar 29 j 21:42	6°☾54'24		retrograde	-1198 Nov 10 j 04:10	27°☾17'48	
				opposition	-1197 Jan 26 j 08:38	25°☾55'44	0°41'48
conjunction	-1205 Jul 14 j 20:35	9°☾26'14	0°05'40	min. Earth dist.	-1197 Jan 27 j 05:08	25°☾54'18	29.20354 AU
minimum elong	-1205 Jul 14 j 20:36	9°☾26'14	0°05'41	direct	-1197 Apr 16 j 20:41	24°☾30'31	
behind sun begin	-1205 Jul 14 j 14:18	9°☾25'41					
behind sun end	-1205 Jul 15 j 02:54	9°☾26'48		conjunction	-1197 Aug 01 j 23:16	27°☾02'21	0°41'19
max. Earth dist.	-1205 Jul 14 j 03:06	9°☾24'38	31.12269 AU	minimum elong	-1197 Aug 01 j 23:16	27°☾02'21	0°41'20
retrograde	-1205 Oct 26 j 04:02	11°☾54'19		max. Earth dist.	-1197 Jul 31 j 23:45	27°☾00'10	31.20665 AU
opposition	-1204 Jan 11 j 07:40	10°☾31'42	0°08'23	retrograde	-1197 Nov 12 j 15:43	29°☾29'33	
min. Earth dist.	-1204 Jan 12 j 00:03	10°☾30'33	29.12861 AU	opposition	-1196 Jan 28 j 19:03	28°☾07'29	0°46'22
direct	-1204 Mar 31 j 10:36	9°☾06'21		min. Earth dist.	-1196 Jan 29 j 15:40	28°☾06'03	29.21038 AU
				direct	-1196 Apr 18 j 08:08	26°☾42'14	
conjunction	-1204 Jul 16 j 09:02	11°☾38'11	0°10'13				
minimum elong	-1204 Jul 16 j 09:01	11°☾38'11	0°10'14	conjunction	-1196 Aug 03 j 11:12	29°☾14'01	0°45'33
behind sun begin	-1204 Jul 16 j 03:50	11°☾37'43		minimum elong	-1196 Aug 03 j 11:11	29°☾14'01	0°45'34
behind sun end	-1204 Jul 16 j 14:12	11°☾38'38		max. Earth dist.	-1196 Aug 02 j 12:21	29°☾11'54	31.21308 AU
max. Earth dist.	-1204 Jul 15 j 14:08	11°☾36'26	31.13446 AU		-1196 Aug 24 j 09:33	0°♈	
retrograde	-1204 Oct 27 j 16:09	14°☾06'08		retrograde	-1196 Nov 14 j 01:50	1°♈41'05	
opposition	-1203 Jan 12 j 17:51	12°☾43'36	0°13'16	opposition	-1195 Jan 30 j 05:39	0°♈19'02	0°50'51
min. Earth dist.	-1203 Jan 13 j 09:46	12°☾42'29	29.14075 AU	min. Earth dist.	-1195 Jan 31 j 03:21	0°♈17'31	29.21660 AU

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 14

Attention, astronomical year style is used: The year -1195 in astronomical counting style is the year 1196 BCE in historical counting style.

	-1195 Feb 10 j 17:56	30° $\mathbb{R}\mathbb{E}$		opposition	-1187 Feb 16 j 18:53	17° $\mathbb{Q}47'11$	1°23'32
direct	-1195 Apr 20 j 22:13	28° $\mathbb{E}53'45$		min. Earth dist.	-1187 Feb 17 j 16:57	17° $\mathbb{Q}45'40$	29.28388 AU
	-1195 Jun 26 j 05:03	0° \mathbb{Q}		direct	-1187 May 08 j 18:31	16° $\mathbb{Q}22'05$	
conjunction	-1195 Aug 05 j 22:50	1° $\mathbb{Q}25'29$	0°49'43	conjunction	-1187 Aug 23 j 16:47	18° $\mathbb{Q}53'29$	1°19'56
minimum elong	-1195 Aug 05 j 22:50	1° $\mathbb{Q}25'29$	0°49'45	minimum elong	-1187 Aug 23 j 16:46	18° $\mathbb{Q}53'29$	1°19'57
max. Earth dist.	-1195 Aug 04 j 22:44	1° $\mathbb{Q}23'15$	31.21927 AU	max. Earth dist.	-1187 Aug 22 j 16:58	18° $\mathbb{Q}51'16$	31.28665 AU
retrograde	-1195 Nov 16 j 13:18	3° $\mathbb{Q}52'24$		retrograde	-1187 Dec 03 j 19:29	21° $\mathbb{Q}19'52$	
opposition	-1194 Feb 01 j 16:03	2° $\mathbb{Q}30'21$	0°55'16	opposition	-1186 Feb 19 j 05:56	19° $\mathbb{Q}58'08$	1°27'08
min. Earth dist.	-1194 Feb 02 j 13:03	2° $\mathbb{Q}28'54$	29.22293 AU	min. Earth dist.	-1186 Feb 20 j 05:04	19° $\mathbb{Q}56'33$	29.29088 AU
direct	-1194 Apr 23 j 11:13	1° $\mathbb{Q}05'03$		direct	-1186 May 11 j 07:56	18° $\mathbb{Q}33'03$	
max. Earth dist.	-1194 Aug 07 j 10:59	3° $\mathbb{Q}34'33$	31.22573 AU	max. Earth dist.	-1186 Aug 25 j 02:38	21° $\mathbb{Q}02'05$	31.29302 AU
conjunction	-1194 Aug 08 j 10:28	3° $\mathbb{Q}36'43$	0°53'49	conjunction	-1186 Aug 26 j 03:40	21° $\mathbb{Q}04'24$	1°23'15
minimum elong	-1194 Aug 08 j 10:28	3° $\mathbb{Q}36'43$	0°53'50	minimum elong	-1186 Aug 26 j 03:39	21° $\mathbb{Q}04'24$	1°23'15
retrograde	-1194 Nov 18 j 21:38	6° $\mathbb{Q}03'32$		retrograde	-1186 Dec 06 j 07:07	23° $\mathbb{Q}30'44$	
opposition	-1193 Feb 04 j 02:46	4° $\mathbb{Q}41'29$	0°59'36	opposition	-1185 Feb 21 j 16:54	22° $\mathbb{Q}09'01$	1°30'36
min. Earth dist.	-1193 Feb 05 j 00:49	4° $\mathbb{Q}39'58$	29.22988 AU	min. Earth dist.	-1185 Feb 22 j 15:16	22° $\mathbb{Q}07'29$	29.29666 AU
direct	-1193 Apr 25 j 22:49	3° $\mathbb{Q}16'10$		direct	-1185 May 13 j 20:36	20° $\mathbb{Q}43'57$	
conjunction	-1193 Aug 10 j 21:42	5° $\mathbb{Q}47'47$	0°57'50	conjunction	-1185 Aug 28 j 14:27	23° $\mathbb{Q}15'14$	1°26'26
minimum elong	-1193 Aug 10 j 21:42	5° $\mathbb{Q}47'47$	0°57'50	minimum elong	-1185 Aug 28 j 14:26	23° $\mathbb{Q}15'14$	1°26'26
max. Earth dist.	-1193 Aug 09 j 21:55	5° $\mathbb{Q}45'35$	31.23315 AU	max. Earth dist.	-1185 Aug 27 j 13:53	23° $\mathbb{Q}12'57$	31.29806 AU
retrograde	-1193 Nov 21 j 07:34	8° $\mathbb{Q}14'29$		retrograde	-1185 Dec 08 j 16:03	25° $\mathbb{Q}41'31$	
opposition	-1192 Feb 06 j 13:16	6° $\mathbb{Q}52'29$	1°03'50	opposition	-1184 Feb 24 j 04:02	24° $\mathbb{Q}19'48$	1°33'56
min. Earth dist.	-1192 Feb 07 j 10:21	6° $\mathbb{Q}51'01$	29.23779 AU	min. Earth dist.	-1184 Feb 25 j 03:39	24° $\mathbb{Q}18'10$	29.30122 AU
direct	-1192 Apr 27 j 11:19	5° $\mathbb{Q}27'10$		direct	-1184 May 15 j 08:30	22° $\mathbb{Q}54'44$	
max. Earth dist.	-1192 Aug 11 j 09:21	7° $\mathbb{Q}56'32$	31.24153 AU	max. Earth dist.	-1184 Aug 29 j 00:09	25° $\mathbb{Q}23'37$	31.30214 AU
conjunction	-1192 Aug 12 j 09:04	7° $\mathbb{Q}58'44$	1°01'45	conjunction	-1184 Aug 30 j 01:08	25° $\mathbb{Q}25'56$	1°29'29
minimum elong	-1192 Aug 12 j 09:04	7° $\mathbb{Q}58'44$	1°01'45	minimum elong	-1184 Aug 30 j 01:08	25° $\mathbb{Q}25'56$	1°29'29
retrograde	-1192 Nov 22 j 17:06	10° $\mathbb{Q}25'21$		retrograde	-1184 Dec 10 j 02:01	27° $\mathbb{Q}52'09$	
opposition	-1191 Feb 07 j 23:48	9° $\mathbb{Q}03'24$	1°07'59	opposition	-1183 Feb 25 j 14:53	26° $\mathbb{Q}30'26$	1°37'08
min. Earth dist.	-1191 Feb 08 j 21:42	9° $\mathbb{Q}01'53$	29.24679 AU	min. Earth dist.	-1183 Feb 26 j 13:42	26° $\mathbb{Q}28'51$	29.30486 AU
direct	-1191 Apr 29 j 20:50	7° $\mathbb{Q}38'06$		direct	-1183 May 17 j 21:37	25° $\mathbb{Q}05'21$	
conjunction	-1191 Aug 14 j 20:23	10° $\mathbb{Q}09'39$	1°05'36	max. Earth dist.	-1183 Aug 31 j 10:47	27° $\mathbb{Q}34'10$	31.30546 AU
minimum elong	-1191 Aug 14 j 20:22	10° $\mathbb{Q}09'39$	1°05'36	conjunction	-1183 Sep 01 j 11:44	27° $\mathbb{Q}36'29$	1°32'25
max. Earth dist.	-1191 Aug 13 j 21:03	10° $\mathbb{Q}07'29$	31.25093 AU	minimum elong	-1183 Sep 01 j 11:43	27° $\mathbb{Q}36'29$	1°32'26
retrograde	-1191 Nov 25 j 01:58	12° $\mathbb{Q}36'12$			-1183 Nov 30 j 01:28	0° \mathbb{R}	
opposition	-1190 Feb 10 j 10:27	11° $\mathbb{Q}14'18$	1°12'02	retrograde	-1183 Dec 12 j 11:34	0° $\mathbb{R}02'39$	
min. Earth dist.	-1190 Feb 11 j 07:52	11° $\mathbb{Q}12'49$	29.25639 AU		-1183 Dec 24 j 23:08	30° $\mathbb{R}\mathbb{Q}$	
direct	-1190 May 02 j 09:36	9° $\mathbb{Q}49'04$		opposition	-1182 Feb 28 j 02:03	28° $\mathbb{Q}40'55$	1°40'12
max. Earth dist.	-1190 Aug 16 j 07:20	12° $\mathbb{Q}18'20$	31.26063 AU	min. Earth dist.	-1182 Mar 01 j 01:33	28° $\mathbb{Q}39'18$	29.30820 AU
conjunction	-1190 Aug 17 j 07:26	12° $\mathbb{Q}20'34$	1°09'20	direct	-1182 May 20 j 08:00	27° $\mathbb{Q}15'51$	
minimum elong	-1190 Aug 17 j 07:26	12° $\mathbb{Q}20'34$	1°09'21	conjunction	-1182 Sep 03 j 22:02	29° $\mathbb{Q}46'53$	1°35'13
retrograde	-1190 Nov 27 j 12:21	14° $\mathbb{Q}47'05$		minimum elong	-1182 Sep 03 j 22:02	29° $\mathbb{Q}46'53$	1°35'13
opposition	-1189 Feb 12 j 21:14	13° $\mathbb{Q}25'15$	1°15'59	max. Earth dist.	-1182 Sep 02 j 21:53	29° $\mathbb{Q}44'38$	31.30880 AU
min. Earth dist.	-1189 Feb 13 j 19:00	13° $\mathbb{Q}23'44$	29.26623 AU		-1182 Sep 09 j 18:47	0° \mathbb{R}	
direct	-1189 May 04 j 19:28	12° $\mathbb{Q}00'03$		retrograde	-1182 Dec 14 j 19:51	2° $\mathbb{R}13'01$	
conjunction	-1189 Aug 19 j 18:38	14° $\mathbb{Q}31'32$	1°12'59	opposition	-1181 Mar 02 j 13:11	0° $\mathbb{R}51'15$	1°43'07
minimum elong	-1189 Aug 19 j 18:37	14° $\mathbb{Q}31'32$	1°13'00	min. Earth dist.	-1181 Mar 03 j 11:51	0° $\mathbb{R}49'42$	29.31169 AU
max. Earth dist.	-1189 Aug 18 j 19:21	14° $\mathbb{Q}29'22$	31.27022 AU		-1181 Apr 04 j 23:51	30° $\mathbb{R}\mathbb{Q}$	
retrograde	-1189 Sep 01 j 14:05	15° \mathbb{Q}		direct	-1181 May 22 j 21:03	29° $\mathbb{Q}26'12$	
opposition	-1189 Nov 29 j 21:43	16° $\mathbb{Q}58'00$		max. Earth dist.	-1181 Jul 08 j 07:15	0° \mathbb{R}	
min. Earth dist.	-1188 Feb 15 j 08:01	15° $\mathbb{Q}36'13$	1°19'49		-1181 Sep 05 j 07:43	1° $\mathbb{R}54'52$	31.31258 AU
direct	-1188 Feb 16 j 06:17	15° $\mathbb{Q}34'41$	29.27550 AU	conjunction	-1181 Sep 06 j 08:15	1° $\mathbb{R}57'10$	1°37'53
	-1188 Mar 08 j 22:37	15° $\mathbb{R}\mathbb{Q}$		minimum elong	-1181 Sep 06 j 08:15	1° $\mathbb{R}57'10$	1°37'53
max. Earth dist.	-1188 May 06 j 07:22	14° $\mathbb{Q}11'04$		retrograde	-1181 Dec 17 j 05:48	4° $\mathbb{R}23'16$	
retrograde	-1188 Jul 01 j 18:14	15° \mathbb{Q}		opposition	-1180 Mar 04 j 00:13	3° $\mathbb{R}01'30$	1°45'53
min. Earth dist.	-1188 Aug 20 j 05:03	16° $\mathbb{Q}40'14$	31.27903 AU	min. Earth dist.	-1180 Mar 04 j 22:38	2° $\mathbb{R}59'58$	29.31607 AU
conjunction	-1188 Aug 21 j 05:38	16° $\mathbb{Q}42'31$	1°16'31	direct	-1180 May 24 j 06:29	1° $\mathbb{R}36'29$	
minimum elong	-1188 Aug 21 j 05:38	16° $\mathbb{Q}42'31$	1°16'31	conjunction	-1180 Sep 07 j 18:32	4° $\mathbb{R}07'23$	1°40'24
retrograde	-1188 Dec 01 j 09:26	19° $\mathbb{Q}08'57$		minimum elong	-1180 Sep 07 j 18:32	4° $\mathbb{R}07'23$	1°40'24

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 15

Attention, astronomical year style is used: The year -1180 in astronomical counting style is the year 1181 BCE in historical counting style.

max. Earth dist.	-1180 Sep 06 j 19:26	4° \mathring{M} 05'13	31.31736 AU	min. Earth dist.	-1171 Mar 25 j 04:14	22° \mathring{M} 34'40	29.35359 AU
retrograde	-1180 Dec 18 j 14:43	6° \mathring{M} 33'30		direct	-1171 Jun 13 j 16:14	21° \mathring{M} 11'31	
opposition	-1179 Mar 06 j 11:27	5° \mathring{M} 11'44	1°48'30				
min. Earth dist.	-1179 Mar 07 j 09:42	5° \mathring{M} 10'13	29.32127 AU	conjunction	-1171 Sep 27 j 12:08	23° \mathring{M} 41'48	1°56'16
direct	-1179 May 26 j 17:43	3° \mathring{M} 46'46		minimum elong	-1171 Sep 27 j 12:08	23° \mathring{M} 41'48	1°56'16
max. Earth dist.	-1179 Sep 09 j 04:55	6° \mathring{M} 15'24	31.32304 AU	max. Earth dist.	-1171 Sep 26 j 15:27	23° \mathring{M} 39'52	31.35162 AU
				retrograde	-1170 Jan 07 j 10:34	26° \mathring{M} 08'09	
conjunction	-1179 Sep 10 j 04:33	6° \mathring{M} 17'37	1°42'46	opposition	-1170 Mar 26 j 19:36	24° \mathring{M} 46'24	2°04'42
minimum elong	-1179 Sep 10 j 04:33	6° \mathring{M} 17'37	1°42'47	min. Earth dist.	-1170 Mar 27 j 16:04	24° \mathring{M} 45'01	29.35234 AU
retrograde	-1179 Dec 21 j 02:18	8° \mathring{M} 43'45		direct	-1170 Jun 16 j 04:17	23° \mathring{M} 21'52	
opposition	-1178 Mar 08 j 22:40	7° \mathring{M} 22'02	1°50'58				
min. Earth dist.	-1178 Mar 09 j 19:55	7° \mathring{M} 20'35	29.32740 AU	conjunction	-1170 Sep 29 j 21:39	25° \mathring{M} 52'01	1°57'13
direct	-1178 May 29 j 04:18	5° \mathring{M} 57'08		minimum elong	-1170 Sep 29 j 21:39	25° \mathring{M} 52'01	1°57'13
				max. Earth dist.	-1170 Sep 29 j 00:28	25° \mathring{M} 50'02	31.35017 AU
conjunction	-1178 Sep 12 j 14:43	8° \mathring{M} 27'56	1°45'00	retrograde	-1169 Jan 09 j 21:34	28° \mathring{M} 18'23	
minimum elong	-1178 Sep 12 j 14:43	8° \mathring{M} 27'56	1°45'01	opposition	-1169 Mar 29 j 07:21	26° \mathring{M} 56'34	2°05'39
max. Earth dist.	-1178 Sep 11 j 16:35	8° \mathring{M} 25'52	31.32937 AU	min. Earth dist.	-1169 Mar 30 j 02:40	26° \mathring{M} 55'15	29.35086 AU
retrograde	-1178 Dec 23 j 12:45	10° \mathring{M} 54'07		direct	-1169 Jun 18 j 15:06	25° \mathring{M} 32'02	
opposition	-1177 Mar 11 j 10:06	9° \mathring{M} 32'26	1°53'16	max. Earth dist.	-1169 Oct 01 j 11:37	28° \mathring{M} 00'14	31.34863 AU
min. Earth dist.	-1177 Mar 12 j 07:50	9° \mathring{M} 30'57	29.33388 AU				
direct	-1177 May 31 j 16:46	8° \mathring{M} 07'37		conjunction	-1169 Oct 02 j 07:06	28° \mathring{M} 02'04	1°58'01
max. Earth dist.	-1177 Sep 14 j 01:55	10° \mathring{M} 36'16	31.33585 AU	minimum elong	-1169 Oct 02 j 07:06	28° \mathring{M} 02'04	1°58'02
					-1169 Dec 02 j 01:05	0° \mathring{M}	
conjunction	-1177 Sep 15 j 00:35	10° \mathring{M} 38'23	1°47'05	retrograde	-1168 Jan 12 j 07:11	0° \mathring{M} 28'28	
minimum elong	-1177 Sep 15 j 00:35	10° \mathring{M} 38'23	1°47'06		-1168 Feb 24 j 02:19	30° \mathring{R} \mathring{M}	
retrograde	-1177 Dec 26 j 00:36	13° \mathring{M} 04'36		opposition	-1168 Mar 30 j 19:15	29° \mathring{M} 06'35	2°06'25
opposition	-1176 Mar 12 j 21:25	11° \mathring{M} 42'57	1°55'24	min. Earth dist.	-1168 Mar 31 j 14:43	29° \mathring{M} 05'16	29.34950 AU
min. Earth dist.	-1176 Mar 13 j 17:58	11° \mathring{M} 41'33	29.34015 AU	direct	-1168 Jun 20 j 02:55	27° \mathring{M} 42'04	
direct	-1176 Jun 02 j 04:27	10° \mathring{M} 18'13			-1168 Sep 28 j 08:22	0° \mathring{M}	
conjunction	-1176 Sep 16 j 10:41	12° \mathring{M} 48'56	1°49'01	conjunction	-1168 Oct 03 j 16:24	0° \mathring{M} 12'00	1°58'39
minimum elong	-1176 Sep 16 j 10:41	12° \mathring{M} 48'56	1°49'00	minimum elong	-1168 Oct 03 j 16:24	0° \mathring{M} 12'00	1°58'38
max. Earth dist.	-1176 Sep 15 j 12:44	12° \mathring{M} 46'53	31.34165 AU	max. Earth dist.	-1168 Oct 02 j 20:54	0° \mathring{M} 10'10	31.34761 AU
retrograde	-1176 Dec 27 j 10:17	15° \mathring{M} 15'12		retrograde	-1167 Jan 13 j 18:33	2° \mathring{M} 38'27	
opposition	-1175 Mar 15 j 08:57	13° \mathring{M} 53'34	1°57'23	opposition	-1167 Apr 02 j 07:00	1° \mathring{M} 16'32	2°07'00
min. Earth dist.	-1175 Mar 16 j 06:30	13° \mathring{M} 52'06	29.34559 AU	min. Earth dist.	-1167 Apr 03 j 00:38	1° \mathring{M} 15'20	29.34884 AU
direct	-1175 Jun 04 j 16:09	12° \mathring{M} 28'55			-1167 May 31 j 02:22	30° \mathring{R} \mathring{M}	
				direct	-1167 Jun 22 j 14:08	29° \mathring{M} 52'03	
conjunction	-1175 Sep 18 j 20:41	14° \mathring{M} 59'34	1°50'47		-1167 Jul 14 j 20:12	0° \mathring{M}	
minimum elong	-1175 Sep 18 j 20:41	14° \mathring{M} 59'34	1°50'47	max. Earth dist.	-1167 Oct 05 j 07:31	2° \mathring{M} 20'11	31.34732 AU
max. Earth dist.	-1175 Sep 17 j 22:43	14° \mathring{M} 57'31	31.34654 AU				
retrograde	-1175 Dec 29 j 21:21	17° \mathring{M} 25'51		conjunction	-1167 Oct 06 j 01:49	2° \mathring{M} 21'54	1°59'07
opposition	-1174 Mar 17 j 20:35	16° \mathring{M} 04'15	1°59'11	minimum elong	-1167 Oct 06 j 01:49	2° \mathring{M} 21'54	1°59'07
min. Earth dist.	-1174 Mar 18 j 17:06	16° \mathring{M} 02'51	29.34978 AU	retrograde	-1166 Jan 16 j 04:43	4° \mathring{M} 48'27	
direct	-1174 Jun 07 j 05:48	14° \mathring{M} 39'39		opposition	-1166 Apr 04 j 19:05	3° \mathring{M} 26'30	2°07'24
max. Earth dist.	-1174 Sep 20 j 08:36	17° \mathring{M} 08'11	31.34995 AU	min. Earth dist.	-1166 Apr 05 j 12:56	3° \mathring{M} 25'17	29.34899 AU
				direct	-1166 Jun 25 j 01:40	2° \mathring{M} 02'05	
conjunction	-1174 Sep 21 j 06:34	17° \mathring{M} 10'14	1°52'24	conjunction	-1166 Oct 08 j 10:59	4° \mathring{M} 31'52	1°59'24
minimum elong	-1174 Sep 21 j 06:34	17° \mathring{M} 10'14	1°52'23	minimum elong	-1166 Oct 08 j 10:59	4° \mathring{M} 31'52	1°59'23
retrograde	-1173 Jan 01 j 07:43	19° \mathring{M} 36'33		max. Earth dist.	-1166 Oct 07 j 17:32	4° \mathring{M} 30'14	31.34787 AU
opposition	-1173 Mar 20 j 08:22	18° \mathring{M} 14'56	2°00'49	retrograde	-1165 Jan 18 j 15:55	6° \mathring{M} 58'30	
min. Earth dist.	-1173 Mar 21 j 05:31	18° \mathring{M} 13'30	29.35258 AU	opposition	-1165 Apr 07 j 07:02	5° \mathring{M} 36'33	2°07'37
direct	-1173 Jun 09 j 16:57	16° \mathring{M} 50'22		min. Earth dist.	-1165 Apr 07 j 23:15	5° \mathring{M} 35'27	29.34963 AU
				direct	-1165 Jun 27 j 14:50	4° \mathring{M} 12'14	
conjunction	-1173 Sep 23 j 16:33	19° \mathring{M} 20'52	1°53'51	conjunction	-1165 Oct 10 j 20:16	6° \mathring{M} 41'58	1°59'31
minimum elong	-1173 Sep 23 j 16:33	19° \mathring{M} 20'52	1°53'51	minimum elong	-1165 Oct 10 j 20:16	6° \mathring{M} 41'58	1°59'31
max. Earth dist.	-1173 Sep 22 j 19:14	19° \mathring{M} 18'52	31.35195 AU	max. Earth dist.	-1165 Oct 10 j 03:13	6° \mathring{M} 40'22	31.34859 AU
retrograde	-1172 Jan 03 j 15:57	21° \mathring{M} 47'12		retrograde	-1164 Jan 21 j 02:52	9° \mathring{M} 08'42	
opposition	-1172 Mar 21 j 19:57	20° \mathring{M} 25'33	2°02'17	opposition	-1164 Apr 08 j 19:00	7° \mathring{M} 46'46	2°07'39
min. Earth dist.	-1172 Mar 22 j 16:32	20° \mathring{M} 24'09	29.35373 AU	min. Earth dist.	-1164 Apr 09 j 11:24	7° \mathring{M} 45'39	29.35039 AU
direct	-1172 Jun 11 j 05:58	19° \mathring{M} 01'00		direct	-1164 Jun 29 j 01:32	6° \mathring{M} 22'32	
max. Earth dist.	-1172 Sep 24 j 04:20	21° \mathring{M} 29'20	31.35238 AU				
conjunction	-1172 Sep 25 j 02:24	21° \mathring{M} 31'24	1°55'08	conjunction	-1164 Oct 12 j 05:39	8° \mathring{M} 52'13	1°59'28
minimum elong	-1172 Sep 25 j 02:24	21° \mathring{M} 31'24	1°55'08	minimum elong	-1164 Oct 12 j 05:39	8° \mathring{M} 52'13	1°59'27
retrograde	-1171 Jan 05 j 01:54	23° \mathring{M} 57'45		max. Earth dist.	-1164 Oct 11 j 13:51	8° \mathring{M} 50'44	31.34917 AU
opposition	-1171 Mar 24 j 07:43	22° \mathring{M} 36'03	2°03'35				

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 16

Attention, astronomical year style is used: The year -1163 in astronomical counting style is the year 1164 BCE in historical counting style.

retrograde	-1163 Jan 22 j 11:52	11° ♂ 19'04		direct	-1155 Jul 19 j 09:04	25° ♂ 57'35	
opposition	-1163 Apr 11 j 07:12	9° ♂ 57'08	2°07'30				
min. Earth dist.	-1163 Apr 11 j 22:36	9° ♂ 56'06	29.35055 AU	conjunction	-1155 Oct 31 j 15:58	28° ♂ 26'27	1°51'27
direct	-1163 Jul 01 j 14:14	8° ♂ 33'00		minimum elong	-1155 Oct 31 j 15:59	28° ♂ 26'27	1°51'26
				max. Earth dist.	-1155 Oct 31 j 06:21	28° ♂ 25'33	31.30827 AU
conjunction	-1163 Oct 14 j 14:48	11° ♂ 02'38	1°59'14		-1155 Dec 15 j 08:34	0° ♂	
minimum elong	-1163 Oct 14 j 14:48	11° ♂ 02'37	1°59'14	retrograde	-1154 Feb 11 j 11:41	0° ♂ 54'12	
max. Earth dist.	-1163 Oct 13 j 22:38	11° ♂ 01'06	31.34894 AU		-1154 Apr 14 j 03:06	30° ♂ ♂	
retrograde	-1162 Jan 24 j 22:37	13° ♂ 29'36		opposition	-1154 May 01 j 22:56	29° ♂ 31'43	1°58'10
opposition	-1162 Apr 13 j 19:32	12° ♂ 07'40	2°07'10	min. Earth dist.	-1154 May 02 j 08:05	29° ♂ 31'06	29.30678 AU
min. Earth dist.	-1162 Apr 14 j 10:29	12° ♂ 06'39	29.34988 AU	direct	-1154 Jul 21 j 22:07	28° ♂ 07'52	
direct	-1162 Jul 04 j 00:22	10° ♂ 43'36			-1154 Oct 17 j 16:15	0° ♂	
max. Earth dist.	-1162 Oct 16 j 09:35	13° ♂ 11'48	31.34762 AU				
				conjunction	-1154 Nov 03 j 00:50	0° ♂ 36'40	1°49'44
conjunction	-1162 Oct 17 j 00:13	13° ♂ 13'10	1°58'51	minimum elong	-1154 Nov 03 j 00:50	0° ♂ 36'40	1°49'44
minimum elong	-1162 Oct 17 j 00:13	13° ♂ 13'10	1°58'50	max. Earth dist.	-1154 Nov 02 j 15:16	0° ♂ 35'46	31.30325 AU
retrograde	-1161 Jan 27 j 08:05	15° ♂ 40'16		retrograde	-1153 Feb 13 j 22:51	3° ♂ 04'32	
opposition	-1161 Apr 16 j 07:53	14° ♂ 18'18	2°06'40	opposition	-1153 May 04 j 11:21	1° ♂ 42'00	1°56'15
min. Earth dist.	-1161 Apr 16 j 22:45	14° ♂ 17'18	29.34783 AU	min. Earth dist.	-1153 May 04 j 19:29	1° ♂ 41'27	29.30222 AU
direct	-1161 Jul 06 j 12:04	12° ♂ 54'18		direct	-1153 Jul 24 j 08:56	0° ♂ 18'13	
conjunction	-1161 Oct 19 j 09:26	15° ♂ 23'48	1°58'17	conjunction	-1153 Nov 05 j 09:50	2° ♂ 46'56	1°47'52
minimum elong	-1161 Oct 19 j 09:26	15° ♂ 23'48	1°58'17	minimum elong	-1153 Nov 05 j 09:50	2° ♂ 46'56	1°47'52
max. Earth dist.	-1161 Oct 18 j 18:12	15° ♂ 22'22	31.34489 AU	max. Earth dist.	-1153 Nov 05 j 02:20	2° ♂ 46'14	31.29902 AU
retrograde	-1160 Jan 29 j 19:33	17° ♂ 51'00		retrograde	-1152 Feb 16 j 08:33	5° ♂ 14'57	
opposition	-1160 Apr 17 j 20:13	16° ♂ 29'00	2°05'58	opposition	-1152 May 05 j 23:57	3° ♂ 52'23	1°54'11
min. Earth dist.	-1160 Apr 18 j 10:02	16° ♂ 28'04	29.34432 AU	min. Earth dist.	-1152 May 06 j 07:29	3° ♂ 51'53	29.29807 AU
direct	-1160 Jul 07 j 22:41	15° ♂ 05'03		direct	-1152 Jul 25 j 20:59	2° ♂ 28'40	
conjunction	-1160 Oct 20 j 18:47	17° ♂ 34'27	1°57'33	conjunction	-1152 Nov 06 j 18:38	4° ♂ 57'19	1°45'51
minimum elong	-1160 Oct 20 j 18:47	17° ♂ 34'27	1°57'32	minimum elong	-1152 Nov 06 j 18:39	4° ♂ 57'19	1°45'50
max. Earth dist.	-1160 Oct 20 j 04:53	17° ♂ 33'09	31.34052 AU	max. Earth dist.	-1152 Nov 06 j 11:10	4° ♂ 56'37	31.29509 AU
retrograde	-1159 Jan 31 j 05:37	20° ♂ 01'46		retrograde	-1151 Feb 17 j 19:48	7° ♂ 25'29	
opposition	-1159 Apr 20 j 08:42	18° ♂ 39'42	2°05'06	opposition	-1151 May 08 j 12:33	6° ♂ 02'54	1°51'56
min. Earth dist.	-1159 Apr 20 j 22:54	18° ♂ 38'44	29.33917 AU	min. Earth dist.	-1151 May 08 j 18:33	6° ♂ 02'30	29.29411 AU
direct	-1159 Jul 10 j 09:56	17° ♂ 15'46		direct	-1151 Jul 28 j 07:12	4° ♂ 39'15	
conjunction	-1159 Oct 23 j 03:58	19° ♂ 45'04	1°56'39	conjunction	-1151 Nov 09 j 03:42	7° ♂ 07'51	1°43'41
minimum elong	-1159 Oct 23 j 03:58	19° ♂ 45'04	1°56'39	minimum elong	-1151 Nov 09 j 03:42	7° ♂ 07'51	1°43'40
max. Earth dist.	-1159 Oct 22 j 13:57	19° ♂ 43'45	31.33485 AU	max. Earth dist.	-1151 Nov 08 j 21:54	7° ♂ 07'18	31.29099 AU
retrograde	-1158 Feb 02 j 17:15	22° ♂ 12'28		retrograde	-1150 Feb 20 j 06:03	9° ♂ 36'11	
opposition	-1158 Apr 22 j 21:07	20° ♂ 50'19	2°04'04	opposition	-1150 May 11 j 01:26	8° ♂ 13'34	1°49'32
min. Earth dist.	-1158 Apr 23 j 09:38	20° ♂ 49'29	29.33286 AU	min. Earth dist.	-1150 May 11 j 07:29	8° ♂ 13'09	29.28976 AU
direct	-1158 Jul 12 j 20:38	19° ♂ 26'24		direct	-1150 Jul 30 j 17:45	6° ♂ 50'00	
conjunction	-1158 Oct 25 j 13:02	21° ♂ 55'35	1°55'35	conjunction	-1150 Nov 11 j 12:40	9° ♂ 18'31	1°41'21
minimum elong	-1158 Oct 25 j 13:02	21° ♂ 55'36	1°55'35	minimum elong	-1150 Nov 11 j 12:40	9° ♂ 18'32	1°41'20
max. Earth dist.	-1158 Oct 25 j 00:00	21° ♂ 54'22	31.32809 AU	max. Earth dist.	-1150 Nov 11 j 07:07	9° ♂ 18'00	31.28641 AU
retrograde	-1157 Feb 05 j 03:54	24° ♂ 23'04		retrograde	-1149 Feb 22 j 18:16	11° ♂ 47'01	
opposition	-1157 Apr 25 j 09:39	23° ♂ 00'50	2°02'51	opposition	-1149 May 13 j 14:10	10° ♂ 24'22	1°46'58
min. Earth dist.	-1157 Apr 25 j 22:32	22° ♂ 59'58	29.32585 AU	min. Earth dist.	-1149 May 13 j 18:27	10° ♂ 24'04	29.28463 AU
direct	-1157 Jul 15 j 08:45	21° ♂ 36'55		direct	-1149 Aug 02 j 04:09	9° ♂ 00'51	
conjunction	-1157 Oct 27 j 22:05	24° ♂ 05'59	1°54'22	conjunction	-1149 Nov 13 j 21:50	11° ♂ 29'20	1°38'53
minimum elong	-1157 Oct 27 j 22:05	24° ♂ 05'59	1°54'22	minimum elong	-1149 Nov 13 j 21:50	11° ♂ 29'20	1°38'52
max. Earth dist.	-1157 Oct 27 j 10:03	24° ♂ 04'51	31.32105 AU	max. Earth dist.	-1149 Nov 13 j 16:59	11° ♂ 28'52	31.28068 AU
retrograde	-1156 Feb 07 j 15:31	26° ♂ 33'31		retrograde	-1148 Feb 25 j 05:50	13° ♂ 57'59	
opposition	-1156 Apr 26 j 21:52	25° ♂ 11'12	2°01'27	opposition	-1148 May 15 j 03:00	12° ♂ 35'17	1°44'15
min. Earth dist.	-1156 Apr 27 j 08:59	25° ♂ 10'27	29.31877 AU	min. Earth dist.	-1148 May 15 j 07:45	12° ♂ 34'57	29.27829 AU
direct	-1156 Jul 16 j 22:07	23° ♂ 47'17		direct	-1148 Aug 03 j 15:19	11° ♂ 11'49	
conjunction	-1156 Oct 29 j 07:03	26° ♂ 16'15	1°52'59	conjunction	-1148 Nov 15 j 07:05	13° ♂ 40'14	1°36'16
minimum elong	-1156 Oct 29 j 07:03	26° ♂ 16'15	1°52'58	minimum elong	-1148 Nov 15 j 07:05	13° ♂ 40'14	1°36'15
max. Earth dist.	-1156 Oct 28 j 19:33	26° ♂ 15'10	31.31421 AU	max. Earth dist.	-1148 Nov 15 j 03:09	13° ♂ 39'52	31.27377 AU
retrograde	-1155 Feb 09 j 02:37	28° ♂ 43'54			-1148 Dec 22 j 08:19	15° ♂	
opposition	-1155 Apr 29 j 10:25	27° ♂ 21'28	1°59'54	retrograde	-1147 Feb 26 j 18:19	16° ♂ 09'01	
min. Earth dist.	-1155 Apr 29 j 21:11	27° ♂ 20'45	29.31236 AU		-1147 May 09 j 03:08	15° ♂ ♂	

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Attention, astronomical year style is used: The year -1147 in astronomical counting style is the year 1148 BCE in historical counting style.

opposition	-1147 May 17 j 15:54	14°M46'16	1°41'23	retrograde	-1139 Mar 16 j 12:16	3°J38'01	
min. Earth dist.	-1147 May 17 j 19:05	14°M46'03	29.27055 AU	opposition	-1139 Jun 04 j 23:16	2°J14'42	1°13'37
direct	-1147 Aug 06 j 03:57	13°M22'50		min. Earth dist.	-1139 Jun 04 j 19:20	2°J14'58	29.20081 AU
	-1147 Oct 25 j 15:35	15°M		direct	-1139 Aug 23 j 21:31	0°J51'34	
conjunction	-1147 Nov 17 j 16:09	15°M51'11	1°33'31	conjunction	-1139 Dec 04 j 17:10	3°J19'26	1°07'02
minimum elong	-1147 Nov 17 j 16:09	15°M51'11	1°33'31	minimum elong	-1139 Dec 04 j 17:10	3°J19'26	1°07'02
max. Earth dist.	-1147 Nov 17 j 12:17	15°M50'49	31.26541 AU	max. Earth dist.	-1139 Dec 04 j 22:06	3°J19'54	31.19713 AU
retrograde	-1146 Mar 01 j 06:24	18°M20'07		retrograde	-1138 Mar 19 j 01:24	5°J49'37	
opposition	-1146 May 20 j 04:58	16°M57'17	1°38'23	opposition	-1138 Jun 07 j 12:17	4°J26'17	1°09'35
min. Earth dist.	-1146 May 20 j 08:10	16°M57'04	29.26160 AU	min. Earth dist.	-1138 Jun 07 j 06:34	4°J26'40	29.19413 AU
direct	-1146 Aug 08 j 14:42	15°M33'53		direct	-1138 Aug 26 j 08:52	3°J03'12	
conjunction	-1146 Nov 20 j 01:25	18°M02'09	1°30'38	conjunction	-1138 Dec 07 j 02:34	5°J31'03	1°03'13
minimum elong	-1146 Nov 20 j 01:25	18°M02'09	1°30'37	minimum elong	-1138 Dec 07 j 02:34	5°J31'04	1°03'12
max. Earth dist.	-1146 Nov 19 j 23:09	18°M01'56	31.25599 AU	max. Earth dist.	-1138 Dec 07 j 07:35	5°J31'32	31.19031 AU
retrograde	-1145 Mar 03 j 16:32	20°M31'12		retrograde	-1137 Mar 21 j 14:16	8°J01'26	
opposition	-1145 May 22 j 17:44	19°M08'16	1°35'14	opposition	-1137 Jun 10 j 01:18	6°J38'04	1°05'27
min. Earth dist.	-1145 May 22 j 19:43	19°M08'08	29.25165 AU	min. Earth dist.	-1137 Jun 09 j 19:39	6°J38'26	29.18709 AU
direct	-1145 Aug 11 j 04:00	17°M44'52		direct	-1137 Aug 28 j 18:28	5°J15'02	
conjunction	-1145 Nov 22 j 10:26	20°M13'03	1°27'37	conjunction	-1137 Dec 09 j 12:10	7°J42'52	0°59'18
minimum elong	-1145 Nov 22 j 10:26	20°M13'03	1°27'37	minimum elong	-1137 Dec 09 j 12:10	7°J42'52	0°59'18
max. Earth dist.	-1145 Nov 22 j 07:58	20°M12'49	31.24590 AU	max. Earth dist.	-1137 Dec 09 j 18:46	7°J43'30	31.18285 AU
retrograde	-1144 Mar 05 j 04:33	22°M42'14		retrograde	-1136 Mar 23 j 02:10	10°J13'25	
opposition	-1144 May 24 j 06:37	21°M19'12	1°31'57	opposition	-1136 Jun 11 j 14:24	8°J50'00	1°01'13
min. Earth dist.	-1144 May 24 j 07:43	21°M19'08	29.24150 AU	min. Earth dist.	-1136 Jun 11 j 07:38	8°J50'27	29.17899 AU
direct	-1144 Aug 12 j 15:29	19°M55'49		direct	-1136 Aug 30 j 07:47	7°J27'01	
conjunction	-1144 Nov 23 j 19:30	22°M23'56	1°24'29	conjunction	-1136 Dec 10 j 21:37	9°J54'49	0°55'18
minimum elong	-1144 Nov 23 j 19:30	22°M23'56	1°24'28	minimum elong	-1136 Dec 10 j 21:37	9°J54'49	0°55'17
max. Earth dist.	-1144 Nov 23 j 19:10	22°M23'54	31.23581 AU	max. Earth dist.	-1136 Dec 11 j 03:46	9°J55'24	31.17422 AU
retrograde	-1143 Mar 07 j 14:31	24°M53'15		retrograde	-1135 Mar 25 j 16:12	12°J25'32	
opposition	-1143 May 26 j 19:35	23°M30'08	1°28'32	opposition	-1135 Jun 14 j 03:41	11°J02'03	0°56'54
min. Earth dist.	-1143 May 26 j 19:52	23°M30'07	29.23161 AU	min. Earth dist.	-1135 Jun 13 j 20:20	11°J02'32	29.16973 AU
direct	-1143 Aug 15 j 04:02	22°M06'46		direct	-1135 Sep 01 j 19:25	9°J39'05	
conjunction	-1143 Nov 26 j 04:31	24°M34'47	1°21'14	conjunction	-1135 Dec 13 j 07:26	12°J06'51	0°51'13
minimum elong	-1143 Nov 26 j 04:31	24°M34'47	1°21'13	minimum elong	-1135 Dec 13 j 07:26	12°J06'51	0°51'13
max. Earth dist.	-1143 Nov 26 j 04:27	24°M34'47	31.22644 AU	max. Earth dist.	-1135 Dec 13 j 15:09	12°J07'35	31.16423 AU
retrograde	-1142 Mar 10 j 01:46	27°M04'16		retrograde	-1134 Mar 28 j 02:58	14°J37'43	
opposition	-1142 May 29 j 08:26	25°M41'05	1°24'59	opposition	-1134 Jun 16 j 16:53	13°J14'08	0°52'30
min. Earth dist.	-1142 May 29 j 06:54	25°M41'11	29.22271 AU	min. Earth dist.	-1134 Jun 16 j 09:16	13°J14'39	29.15898 AU
direct	-1142 Aug 17 j 14:30	24°M17'45		direct	-1134 Sep 04 j 07:58	11°J51'11	
conjunction	-1142 Nov 28 j 13:37	26°M45'43	1°17'51	conjunction	-1134 Dec 15 j 17:05	14°J18'53	0°47'04
minimum elong	-1142 Nov 28 j 13:37	26°M45'43	1°17'50	minimum elong	-1134 Dec 15 j 17:06	14°J18'53	0°47'03
max. Earth dist.	-1142 Nov 28 j 15:23	26°M45'53	31.21799 AU	max. Earth dist.	-1134 Dec 16 j 00:35	14°J19'35	31.15296 AU
retrograde	-1141 Mar 12 j 11:54	29°M15'22		retrograde	-1133 Mar 30 j 15:03	16°J49'52	
opposition	-1141 May 31 j 21:24	27°M52'07	1°21'19	opposition	-1133 Jun 19 j 06:01	15°J26'12	0°48'01
min. Earth dist.	-1141 May 31 j 19:34	27°M52'15	29.21469 AU	min. Earth dist.	-1133 Jun 18 j 21:13	15°J26'48	29.14709 AU
direct	-1141 Aug 20 j 00:58	26°M28'51		direct	-1133 Sep 06 j 19:32	14°J03'14	
conjunction	-1141 Nov 30 j 22:44	28°M56'47	1°14'22	conjunction	-1133 Dec 18 j 02:50	16°J30'52	0°42'51
minimum elong	-1141 Nov 30 j 22:44	28°M56'47	1°14'21	minimum elong	-1133 Dec 18 j 02:50	16°J30'52	0°42'50
max. Earth dist.	-1141 Dec 01 j 01:12	28°M57'01	31.21053 AU	max. Earth dist.	-1133 Dec 18 j 11:35	16°J31'41	31.14056 AU
retrograde	-1141 Dec 29 j 15:09	0°J		retrograde	-1132 Apr 01 j 01:27	19°J01'58	
retrograde	-1140 Mar 14 j 00:11	1°J26'35		opposition	-1132 Jun 20 j 19:09	17°J38'11	0°43'28
opposition	-1140 Jun 02 j 10:09	0°J03'19	1°17'31	min. Earth dist.	-1132 Jun 20 j 10:28	17°J38'47	29.13440 AU
min. Earth dist.	-1140 Jun 02 j 06:11	0°J03'35	29.20750 AU	direct	-1132 Sep 08 j 07:16	16°J15'12	
direct	-1140 Jun 04 j 11:16	30°RM		conjunction	-1132 Dec 19 j 12:32	18°J42'45	0°38'34
	-1140 Aug 21 j 11:01	28°M40'06		minimum elong	-1132 Dec 19 j 12:32	18°J42'45	0°38'32
	-1140 Nov 01 j 06:03	0°J		max. Earth dist.	-1132 Dec 19 j 21:57	18°J43'39	31.12795 AU
conjunction	-1140 Dec 02 j 07:57	1°J08'00	1°10'45	retrograde	-1131 Apr 03 j 13:49	21°J14'00	
minimum elong	-1140 Dec 02 j 07:57	1°J08'00	1°10'44	opposition	-1131 Jun 23 j 08:13	19°J50'06	0°38'51
max. Earth dist.	-1140 Dec 02 j 11:24	1°J08'20	31.20363 AU	min. Earth dist.	-1131 Jun 22 j 21:32	19°J50'50	29.12184 AU

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Attention, astronomical year style is used: The year -1131 in astronomical counting style is the year 1132 BCE in historical counting style.

direct	-1131 Sep 10 j 18:31	18° \nearrow 27'05		conjunction	-1123 Jan 05 j 20:37	6° \searrow 20'57	0°02'44
				minimum elong	-1123 Jan 05 j 20:38	6° \searrow 20'57	0°02'42
conjunction	-1131 Dec 21 j 22:10	20° \nearrow 54'35	0°34'13	behind sun begin	-1123 Jan 05 j 14:14	6° \searrow 20'22	
minimum elong	-1131 Dec 21 j 22:10	20° \nearrow 54'35	0°34'12	behind sun end	-1123 Jan 06 j 03:02	6° \searrow 21'31	
max. Earth dist.	-1131 Dec 22 j 08:25	20° \nearrow 55'33	31.11557 AU	max. Earth dist.	-1123 Jan 06 j 13:04	6° \searrow 22'30	31.04858 AU
retrograde	-1130 Apr 06 j 01:13	23° \nearrow 25'59		retrograde	-1123 Apr 21 j 19:57	8° \searrow 53'35	
opposition	-1130 Jun 25 j 21:24	22° \nearrow 01'59	0°34'11	opposition	-1123 Jul 11 j 16:42	7° \searrow 29'17	0°00'21
min. Earth dist.	-1130 Jun 25 j 10:45	22° \nearrow 02'43	29.10988 AU	min. Earth dist.	-1123 Jul 11 j 00:47	7° \searrow 30'22	29.04372 AU
direct	-1130 Sep 13 j 04:57	20° \nearrow 38'58		desc. node	-1123 Aug 06 j 21:12	6° \searrow 48'16	
				direct	-1123 Sep 28 j 11:51	6° \searrow 06'30	
conjunction	-1130 Dec 24 j 08:04	23° \nearrow 06'26	0°29'50				
minimum elong	-1130 Dec 24 j 08:04	23° \nearrow 06'26	0°29'48	conjunction	-1122 Jan 08 j 07:14	8° \searrow 34'06	0°-1'-58
max. Earth dist.	-1130 Dec 24 j 19:53	23° \nearrow 07'33	31.10410 AU	minimum elong	-1122 Jan 08 j 07:13	8° \searrow 34'06	0°02'00
retrograde	-1129 Apr 08 j 13:40	25° \nearrow 37'58		behind sun begin	-1122 Jan 08 j 00:48	8° \searrow 33'31	
opposition	-1129 Jun 28 j 10:12	24° \nearrow 13'54	0°29'28	behind sun end	-1122 Jan 08 j 13:38	8° \searrow 34'41	
min. Earth dist.	-1129 Jun 27 j 21:38	24° \nearrow 14'45	29.09884 AU	max. Earth dist.	-1122 Jan 08 j 23:53	8° \searrow 35'40	31.03829 AU
direct	-1129 Sep 15 j 15:59	22° \nearrow 50'53		retrograde	-1122 Apr 24 j 09:08	11° \searrow 06'53	
				opposition	-1122 Jul 14 j 05:46	9° \searrow 42'33	0°-4'-33
conjunction	-1129 Dec 26 j 17:52	25° \nearrow 18'21	0°25'23	min. Earth dist.	-1122 Jul 13 j 12:28	9° \searrow 43'44	29.03279 AU
minimum elong	-1129 Dec 26 j 17:52	25° \nearrow 18'21	0°25'23	direct	-1122 Sep 30 j 23:27	8° \searrow 19'45	
max. Earth dist.	-1129 Dec 27 j 05:51	25° \nearrow 19'29	31.09356 AU				
retrograde	-1128 Apr 10 j 02:51	27° \nearrow 50'04		conjunction	-1121 Jan 10 j 17:55	10° \searrow 47'21	0°-6'-34
opposition	-1128 Jun 29 j 23:18	26° \nearrow 25'56	0°24'42	minimum elong	-1121 Jan 10 j 17:55	10° \searrow 47'21	0°06'36
min. Earth dist.	-1128 Jun 29 j 10:32	26° \nearrow 26'48	29.08886 AU	behind sun begin	-1121 Jan 10 j 11:53	10° \searrow 46'48	
direct	-1128 Sep 17 j 01:21	25° \nearrow 02'57		behind sun end	-1121 Jan 10 j 23:57	10° \searrow 47'54	
				max. Earth dist.	-1121 Jan 11 j 10:36	10° \searrow 48'55	31.02667 AU
conjunction	-1128 Dec 28 j 03:45	27° \nearrow 30'25	0°20'55	retrograde	-1121 Apr 26 j 20:13	13° \searrow 20'17	
minimum elong	-1128 Dec 28 j 03:45	27° \nearrow 30'25	0°20'54	opposition	-1121 Jul 16 j 18:47	11° \searrow 55'51	0°-9'-27
max. Earth dist.	-1128 Dec 28 j 17:44	27° \nearrow 31'44	31.08403 AU	min. Earth dist.	-1121 Jul 16 j 02:12	11° \searrow 56'59	29.02067 AU
	-1127 Mar 31 j 17:34	0° \searrow		direct	-1121 Oct 03 j 09:54	10° \searrow 33'02	
retrograde	-1127 Apr 12 j 15:32	0° \searrow 02'19					
	-1127 Apr 24 j 15:56	30° \nwarrow		conjunction	-1120 Jan 13 j 04:43	13° \searrow 00'37	0°-11'-7
opposition	-1127 Jul 02 j 12:22	28° \nearrow 38'09	0°19'53	minimum elong	-1120 Jan 13 j 04:43	13° \searrow 00'37	0°11'09
min. Earth dist.	-1127 Jul 01 j 22:07	28° \nearrow 39'07	29.07964 AU	behind sun begin	-1120 Jan 12 j 23:54	13° \searrow 00'11	
direct	-1127 Sep 19 j 14:04	27° \nearrow 15'12		behind sun end	-1120 Jan 13 j 09:32	13° \searrow 01'03	
				max. Earth dist.	-1120 Jan 13 j 22:28	13° \searrow 02'18	31.01416 AU
conjunction	-1127 Dec 30 j 13:42	29° \nearrow 42'42	0°16'24	retrograde	-1120 Apr 28 j 08:29	15° \searrow 33'40	
minimum elong	-1127 Dec 30 j 13:42	29° \nearrow 42'42	0°16'24	opposition	-1120 Jul 18 j 07:44	14° \searrow 09'08	0°-14'-20
max. Earth dist.	-1127 Dec 31 j 03:30	29° \nearrow 44'00	31.07520 AU	min. Earth dist.	-1120 Jul 17 j 13:45	14° \searrow 10'22	29.00778 AU
	-1126 Jan 07 j 04:23	0° \searrow		direct	-1120 Oct 04 j 21:01	12° \searrow 46'16	
retrograde	-1126 Apr 15 j 06:33	2° \searrow 14'46					
min. Earth dist.	-1126 Jul 04 j 10:29	0° \searrow 51'35	29.07108 AU	conjunction	-1119 Jan 14 j 15:14	15° \searrow 13'50	0°-15'-40
opposition	-1126 Jul 05 j 01:23	0° \searrow 50'35	0°15'02	minimum elong	-1119 Jan 14 j 15:14	15° \searrow 13'50	0°15'43
	-1126 Aug 07 j 07:09	30° \nwarrow		behind sun begin	-1119 Jan 14 j 13:40	15° \searrow 13'42	
direct	-1126 Sep 22 j 00:49	29° \nearrow 27'41		behind sun end	-1119 Jan 14 j 16:48	15° \searrow 13'59	
	-1126 Nov 05 j 00:11	0° \searrow		max. Earth dist.	-1119 Jan 15 j 08:47	15° \searrow 15'30	31.00112 AU
				retrograde	-1119 Apr 30 j 21:34	17° \searrow 47'00	
conjunction	-1125 Jan 01 j 23:57	1° \searrow 55'12	0°11'52	opposition	-1119 Jul 20 j 20:48	16° \searrow 22'21	0°-19'-12
minimum elong	-1125 Jan 01 j 23:57	1° \searrow 55'12	0°11'50	min. Earth dist.	-1119 Jul 20 j 03:04	16° \searrow 23'34	28.99488 AU
behind sun begin	-1125 Jan 01 j 19:24	1° \searrow 54'48		direct	-1119 Oct 07 j 06:47	14° \searrow 59'26	
behind sun end	-1125 Jan 02 j 04:29	1° \searrow 55'37					
max. Earth dist.	-1125 Jan 02 j 15:30	1° \searrow 56'40	31.06667 AU	conjunction	-1118 Jan 17 j 02:06	17° \searrow 26'59	0°-20'-12
retrograde	-1125 Apr 17 j 18:13	4° \searrow 27'28		minimum elong	-1118 Jan 17 j 02:06	17° \searrow 26'59	0°20'13
opposition	-1125 Jul 07 j 14:27	3° \searrow 03'15	0°10'09	max. Earth dist.	-1118 Jan 17 j 21:23	17° \searrow 28'48	30.98838 AU
min. Earth dist.	-1125 Jul 06 j 23:10	3° \searrow 04'18	29.06247 AU	retrograde	-1118 May 03 j 10:05	20° \searrow 00'14	
direct	-1125 Sep 24 j 12:40	1° \searrow 40'25		opposition	-1118 Jul 23 j 09:32	18° \searrow 35'30	0°-24'-2
				min. Earth dist.	-1118 Jul 22 j 14:36	18° \searrow 36'48	28.98249 AU
conjunction	-1124 Jan 04 j 10:09	4° \searrow 07'58	0°07'18	direct	-1118 Oct 09 j 19:31	17° \searrow 12'32	
minimum elong	-1124 Jan 04 j 10:08	4° \searrow 07'58	0°07'17				
behind sun begin	-1124 Jan 04 j 04:15	4° \searrow 07'25		conjunction	-1117 Jan 19 j 12:52	19° \searrow 40'05	0°-24'-42
behind sun end	-1124 Jan 04 j 16:02	4° \searrow 08'30		minimum elong	-1117 Jan 19 j 12:52	19° \searrow 40'05	0°24'45
max. Earth dist.	-1124 Jan 05 j 01:35	4° \searrow 09'25	31.05797 AU	max. Earth dist.	-1117 Jan 20 j 07:46	19° \searrow 41'52	30.97647 AU
retrograde	-1124 Apr 19 j 07:48	6° \searrow 40'25		retrograde	-1117 May 06 j 00:47	22° \searrow 13'27	
min. Earth dist.	-1124 Jul 08 j 11:09	5° \searrow 17'17	29.05353 AU	opposition	-1117 Jul 25 j 22:21	20° \searrow 48'37	0°-28'-50
opposition	-1124 Jul 09 j 03:29	5° \searrow 16'10	0°05'15	min. Earth dist.	-1117 Jul 25 j 02:51	20° \searrow 49'57	28.97125 AU
direct	-1124 Sep 26 j 00:08	3° \searrow 53'21		direct	-1117 Oct 12 j 05:55	19° \searrow 25'37	

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Attention, astronomical year style is used: The year -1116 in astronomical counting style is the year 1117 BCE in historical counting style.

conjunction	-1116 Jan 21 j 23:45	21° $\overline{53}$ '11	0°-29'-11	conjunction	-1108 Feb 08 j 19:29	9° \approx 43'01	-1°-2'-59
minimum elong	-1116 Jan 21 j 23:44	21° $\overline{53}$ '11	0°29'12	minimum elong	-1108 Feb 08 j 19:29	9° \approx 43'01	1°03'00
max. Earth dist.	-1116 Jan 22 j 20:26	21° $\overline{55}$ '08	30.96572 AU	max. Earth dist.	-1108 Feb 09 j 18:07	9° \approx 45'10	30.90394 AU
retrograde	-1116 May 07 j 12:27	24° $\overline{26}$ '39		retrograde	-1108 May 25 j 23:47	12° \approx 17'29	
opposition	-1116 Jul 27 j 11:08	23° $\overline{01}$ '46	0°-33'-36	opposition	-1108 Aug 14 j 17:01	10° \approx 52'21	-1°-9'-28
min. Earth dist.	-1116 Jul 26 j 15:02	23° $\overline{03}$ '09	28.96117 AU	min. Earth dist.	-1108 Aug 13 j 18:43	10° \approx 53'54	28.89983 AU
direct	-1116 Oct 13 j 17:35	21° $\overline{38}$ '45		direct	-1108 Oct 31 j 10:34	9° \approx 29'20	
conjunction	-1115 Jan 23 j 10:41	24° $\overline{06}$ '20	0°-33'-36	conjunction	-1107 Feb 10 j 07:35	11° \approx 57'20	-1°-6'-51
minimum elong	-1115 Jan 23 j 10:41	24° $\overline{06}$ '20	0°33'39	minimum elong	-1107 Feb 10 j 07:34	11° \approx 57'20	1°06'54
max. Earth dist.	-1115 Jan 24 j 07:26	24° $\overline{08}$ '17	30.95642 AU	max. Earth dist.	-1107 Feb 11 j 07:20	11° \approx 59'35	30.89430 AU
retrograde	-1115 May 10 j 03:23	26° $\overline{39}$ '56		retrograde	-1107 May 28 j 12:06	14° \approx 31'52	
opposition	-1115 Jul 29 j 23:53	25° $\overline{14}$ '59	0°-38'-19	min. Earth dist.	-1107 Aug 16 j 07:18	13° \approx 08'13	28.89012 AU
min. Earth dist.	-1115 Jul 29 j 02:37	25° $\overline{16}$ '27	28.95259 AU	opposition	-1107 Aug 17 j 05:33	13° \approx 06'40	-1°-13'-33
direct	-1115 Oct 16 j 05:23	23° $\overline{51}$ '58		direct	-1107 Nov 02 j 22:17	11° \approx 43'36	
conjunction	-1114 Jan 25 j 21:47	26° $\overline{19}$ '35	0°-38'00	conjunction	-1106 Feb 12 j 19:36	14° \approx 11'38	-1°-10'-38
minimum elong	-1114 Jan 25 j 21:46	26° $\overline{19}$ '35	0°38'01	minimum elong	-1106 Feb 12 j 19:35	14° \approx 11'38	1°10'40
max. Earth dist.	-1114 Jan 26 j 19:42	26° $\overline{21}$ '40	30.94829 AU	max. Earth dist.	-1106 Feb 13 j 18:50	14° \approx 13'50	30.88471 AU
retrograde	-1114 May 12 j 16:17	28° $\overline{53}$ '19			-1106 Mar 06 j 11:24	15° \approx	
opposition	-1114 Aug 01 j 12:42	27° $\overline{28}$ '21	0°-42'-59	retrograde	-1106 May 31 j 03:35	16° \approx 46'13	
min. Earth dist.	-1114 Jul 31 j 15:40	27° $\overline{29}$ '48	28.94502 AU	opposition	-1106 Aug 19 j 18:00	15° \approx 20'57	-1°-17'-32
direct	-1114 Oct 18 j 17:14	26° $\overline{05}$ '21		min. Earth dist.	-1106 Aug 18 j 19:10	15° \approx 22'32	28.88078 AU
conjunction	-1113 Jan 28 j 09:04	28° $\overline{33}$ '01	0°-42'-20		-1106 Sep 01 j 10:46	15° \approx	
minimum elong	-1113 Jan 28 j 09:03	28° $\overline{33}$ '01	0°42'22	direct	-1106 Nov 05 j 10:38	13° \approx 57'50	
max. Earth dist.	-1113 Jan 29 j 07:24	28° $\overline{35}$ '08	30.94120 AU		-1105 Jan 06 j 01:32	15° \approx	
	-1113 Mar 10 j 00:53	0° \approx		conjunction	-1105 Feb 15 j 07:46	16° \approx 25'55	-1°-14'-18
retrograde	-1113 May 15 j 05:52	1° \approx 06'52		minimum elong	-1105 Feb 15 j 07:45	16° \approx 25'55	1°14'20
	-1113 Jul 24 j 00:31	30° \overline{R} $\overline{3}$		max. Earth dist.	-1105 Feb 16 j 07:46	16° \approx 28'11	30.87551 AU
min. Earth dist.	-1113 Aug 03 j 02:49	29° $\overline{43}$ '26	28.93826 AU	retrograde	-1105 Jun 02 j 16:27	19° \approx 00'33	
opposition	-1113 Aug 04 j 01:15	29° $\overline{41}$ '53	0°-47'-35	min. Earth dist.	-1105 Aug 21 j 08:03	17° \approx 36'47	28.87214 AU
direct	-1113 Oct 21 j 04:46	28° $\overline{18}$ '54		opposition	-1105 Aug 22 j 06:21	17° \approx 35'14	-1°-21'-24
	-1112 Jan 10 j 00:20	0° \approx		direct	-1105 Nov 07 j 22:50	16° \approx 12'04	
conjunction	-1112 Jan 30 j 20:24	0° \approx 46'38	0°-46'-36	conjunction	-1104 Feb 17 j 19:57	18° \approx 40'12	-1°-17'-51
minimum elong	-1112 Jan 30 j 20:24	0° \approx 46'38	0°46'38	minimum elong	-1104 Feb 17 j 19:56	18° \approx 40'12	1°17'52
max. Earth dist.	-1112 Jan 31 j 18:54	0° \approx 48'46	30.93455 AU	max. Earth dist.	-1104 Feb 18 j 20:10	18° \approx 42'29	30.86750 AU
retrograde	-1112 May 16 j 17:56	3° \approx 20'39		retrograde	-1104 Jun 04 j 06:28	21° \approx 14'54	
opposition	-1112 Aug 05 j 14:07	1° \approx 55'39	0°-52'-8	opposition	-1104 Aug 23 j 18:39	19° \approx 49'33	-1°-25'-9
min. Earth dist.	-1112 Aug 04 j 16:23	1° \approx 57'09	28.93179 AU	min. Earth dist.	-1104 Aug 22 j 19:03	19° \approx 51'11	28.86482 AU
direct	-1112 Oct 22 j 15:02	0° \approx 32'42		direct	-1104 Nov 09 j 10:50	18° \approx 26'21	
conjunction	-1111 Feb 01 j 07:56	3° \approx 00'29	0°-50'-49	conjunction	-1103 Feb 19 j 08:06	20° \approx 54'32	-1°-21'-18
minimum elong	-1111 Feb 01 j 07:56	3° \approx 00'29	0°50'51	minimum elong	-1103 Feb 19 j 08:05	20° \approx 54'32	1°21'20
max. Earth dist.	-1111 Feb 02 j 07:26	3° \approx 02'42	30.92804 AU	max. Earth dist.	-1103 Feb 20 j 08:25	20° \approx 56'50	30.86072 AU
retrograde	-1111 May 19 j 07:15	5° \approx 34'37		retrograde	-1103 Jun 06 j 19:06	23° \approx 29'19	
min. Earth dist.	-1111 Aug 07 j 04:02	4° \approx 11'12	28.92507 AU	min. Earth dist.	-1103 Aug 25 j 08:12	22° \approx 05'32	28.85883 AU
opposition	-1111 Aug 08 j 02:50	4° \approx 09'37	0°-56'-36	opposition	-1103 Aug 26 j 07:04	22° \approx 03'56	-1°-28'-46
direct	-1111 Oct 25 j 02:20	2° \approx 46'40		direct	-1103 Nov 11 j 21:45	20° \approx 40'44	
conjunction	-1110 Feb 03 j 19:40	5° \approx 14'32	0°-54'-57	conjunction	-1102 Feb 21 j 20:36	23° \approx 08'59	-1°-24'-37
minimum elong	-1110 Feb 03 j 19:40	5° \approx 14'32	0°54'58	minimum elong	-1102 Feb 21 j 20:36	23° \approx 08'59	1°24'38
max. Earth dist.	-1110 Feb 04 j 18:24	5° \approx 16'41	30.92092 AU	max. Earth dist.	-1102 Feb 22 j 21:50	23° \approx 11'22	30.85541 AU
retrograde	-1110 May 21 j 20:35	7° \approx 48'48		retrograde	-1102 Jun 09 j 09:14	25° \approx 43'49	
opposition	-1110 Aug 10 j 15:35	6° \approx 23'46	-1°00'-59	opposition	-1102 Aug 28 j 19:08	24° \approx 18'26	-1°-32'-15
min. Earth dist.	-1110 Aug 09 j 17:39	6° \approx 25'17	28.91766 AU	min. Earth dist.	-1102 Aug 27 j 19:08	24° \approx 20'06	28.85415 AU
direct	-1110 Oct 27 j 11:55	5° \approx 00'49		direct	-1102 Nov 14 j 09:26	22° \approx 55'13	
conjunction	-1109 Feb 06 j 07:42	7° \approx 28'44	0°-59'-1	conjunction	-1101 Feb 24 j 09:03	25° \approx 23'33	-1°-27'-49
minimum elong	-1109 Feb 06 j 07:42	7° \approx 28'44	0°59'03	minimum elong	-1101 Feb 24 j 09:03	25° \approx 23'33	1°27'51
max. Earth dist.	-1109 Feb 07 j 07:25	7° \approx 30'59	30.91293 AU	max. Earth dist.	-1101 Feb 25 j 09:38	25° \approx 25'53	30.85127 AU
retrograde	-1109 May 24 j 09:14	10° \approx 03'06		retrograde	-1101 Jun 11 j 21:32	27° \approx 58'28	
min. Earth dist.	-1109 Aug 12 j 05:48	8° \approx 39'36	28.90912 AU	min. Earth dist.	-1101 Aug 30 j 08:15	26° \approx 34'43	28.85063 AU
opposition	-1109 Aug 13 j 04:16	8° \approx 38'02	-1°-5'-16	opposition	-1101 Aug 31 j 07:29	26° \approx 33'06	-1°-35'-35
direct	-1109 Oct 30 j 00:16	7° \approx 15'04		direct	-1101 Nov 16 j 19:11	25° \approx 09'53	

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Attention, astronomical year style is used: The year -1100 in astronomical counting style is the year 1101 BCE in historical counting style.

conjunction	-1100 Feb 26 j 21:39	27° \approx 38'18	-1°-30'-52	direct	-1093 Dec 04 j 17:39	13° \approx 10'21	
minimum elong	-1100 Feb 26 j 21:39	27° \approx 38'18	1°30'54				
max. Earth dist.	-1100 Feb 27 j 23:27	27° \approx 40'44	30.84810 AU	conjunction	-1092 Mar 16 j 07:16	15° \approx 39'18	-1°-50'-4
	-1100 May 15 j 19:34	0° \approx		minimum elong	-1092 Mar 16 j 07:15	15° \approx 39'18	1°50'04
retrograde	-1100 Jun 13 j 09:37	0° \approx 13'18		max. Earth dist.	-1092 Mar 17 j 05:31	15° \approx 41'24	30.81159 AU
	-1100 Jul 12 j 10:59	30° \approx		retrograde	-1092 Jul 01 j 22:45	18° \approx 14'20	
opposition	-1100 Sep 01 j 19:43	28° \approx 47'56	-1°-38'-47	opposition	-1092 Sep 19 j 20:13	16° \approx 48'48	-1°-58'-38
min. Earth dist.	-1100 Aug 31 j 19:56	28° \approx 49'36	28.84774 AU	min. Earth dist.	-1092 Sep 18 j 23:51	16° \approx 50'14	28.81077 AU
direct	-1100 Nov 18 j 06:56	27° \approx 24'44		direct	-1092 Dec 06 j 04:09	15° \approx 25'11	
conjunction	-1099 Feb 28 j 10:25	29° \approx 53'15	-1°-33'-48	conjunction	-1091 Mar 18 j 20:50	17° \approx 54'13	-1°-51'-44
minimum elong	-1099 Feb 28 j 10:25	29° \approx 53'14	1°33'50	minimum elong	-1091 Mar 18 j 20:50	17° \approx 54'13	1°51'46
max. Earth dist.	-1099 Mar 01 j 11:01	29° \approx 55'34	30.84538 AU	max. Earth dist.	-1091 Mar 19 j 20:00	17° \approx 56'23	30.80750 AU
	-1099 Mar 03 j 09:58	0° \approx		retrograde	-1091 Jul 04 j 10:58	20° \approx 29'13	
retrograde	-1099 Jun 16 j 00:03	2° \approx 28'18		min. Earth dist.	-1091 Sep 21 j 11:01	19° \approx 05'08	28.80730 AU
min. Earth dist.	-1099 Sep 03 j 08:40	1° \approx 04'35	28.84514 AU	opposition	-1091 Sep 22 j 07:47	19° \approx 03'40	-2°00'-20
opposition	-1099 Sep 04 j 07:57	1° \approx 02'58	-1°-41'-50	direct	-1091 Dec 08 j 16:16	17° \approx 40'01	
	-1099 Oct 16 j 18:20	30° \approx					
direct	-1099 Nov 20 j 16:13	29° \approx 39'45		conjunction	-1090 Mar 21 j 10:20	20° \approx 09'07	-1°-53'-14
	-1099 Dec 24 j 23:40	0° \approx		minimum elong	-1090 Mar 21 j 10:20	20° \approx 09'07	1°53'15
				max. Earth dist.	-1090 Mar 22 j 08:09	20° \approx 11'11	30.80472 AU
conjunction	-1098 Mar 02 j 23:34	2° \approx 08'22	-1°-36'-35	retrograde	-1090 Jul 07 j 00:42	22° \approx 44'07	
minimum elong	-1098 Mar 02 j 23:34	2° \approx 08'22	1°36'36	opposition	-1090 Sep 24 j 19:29	21° \approx 18'35	-2°-1'-51
max. Earth dist.	-1098 Mar 04 j 00:53	2° \approx 10'45	30.84248 AU	min. Earth dist.	-1090 Sep 23 j 23:10	21° \approx 20'01	28.80531 AU
retrograde	-1098 Jun 18 j 12:39	4° \approx 43'28		direct	-1090 Dec 11 j 01:44	19° \approx 54'53	
opposition	-1098 Sep 06 j 20:11	3° \approx 18'08	-1°-44'-44				
min. Earth dist.	-1098 Sep 05 j 21:23	3° \approx 19'44	28.84193 AU	conjunction	-1089 Mar 23 j 23:56	22° \approx 24'06	-1°-54'-34
direct	-1098 Nov 23 j 03:55	1° \approx 54'55		minimum elong	-1089 Mar 23 j 23:56	22° \approx 24'06	1°54'36
				max. Earth dist.	-1089 Mar 24 j 22:39	22° \approx 26'14	30.80332 AU
conjunction	-1097 Mar 05 j 12:42	4° \approx 23'36	-1°-39'-13	retrograde	-1089 Jul 09 j 12:14	24° \approx 59'05	
minimum elong	-1097 Mar 05 j 12:42	4° \approx 23'36	1°39'15	min. Earth dist.	-1089 Sep 26 j 10:57	23° \approx 35'00	28.80456 AU
max. Earth dist.	-1097 Mar 06 j 12:44	4° \approx 25'52	30.83886 AU	opposition	-1089 Sep 27 j 07:03	23° \approx 33'35	-2°-3'-10
retrograde	-1097 Jun 21 j 03:47	6° \approx 58'44		direct	-1089 Dec 13 j 13:16	22° \approx 09'53	
min. Earth dist.	-1097 Sep 08 j 09:36	5° \approx 34'59	28.83788 AU				
opposition	-1097 Sep 09 j 08:20	5° \approx 33'24	-1°-47'-28	conjunction	-1088 Mar 25 j 13:35	24° \approx 39'12	-1°-55'-44
direct	-1097 Nov 25 j 15:58	4° \approx 10'07		minimum elong	-1088 Mar 25 j 13:34	24° \approx 39'12	1°55'44
				max. Earth dist.	-1088 Mar 26 j 11:08	24° \approx 41'13	30.80331 AU
conjunction	-1096 Mar 07 j 02:00	6° \approx 38'53	-1°-41'-42	retrograde	-1088 Jul 11 j 02:33	27° \approx 14'10	
minimum elong	-1096 Mar 07 j 02:00	6° \approx 38'53	1°41'43	opposition	-1088 Sep 28 j 18:36	25° \approx 48'44	-2°-4'-19
max. Earth dist.	-1096 Mar 08 j 02:07	6° \approx 41'10	30.83417 AU	min. Earth dist.	-1088 Sep 27 j 22:28	25° \approx 50'09	28.80512 AU
retrograde	-1096 Jun 22 j 16:23	9° \approx 14'02		direct	-1088 Dec 15 j 00:32	24° \approx 25'01	
opposition	-1096 Sep 10 j 20:34	7° \approx 48'39	-1°-50'-3				
min. Earth dist.	-1096 Sep 09 j 23:02	7° \approx 50'10	28.83276 AU	conjunction	-1087 Mar 28 j 03:24	26° \approx 54'28	-1°-56'-42
direct	-1096 Nov 27 j 04:01	6° \approx 25'20		minimum elong	-1087 Mar 28 j 03:24	26° \approx 54'28	1°56'44
				max. Earth dist.	-1087 Mar 29 j 01:17	26° \approx 56'31	30.80417 AU
conjunction	-1095 Mar 09 j 15:16	8° \approx 54'08	-1°-44'-2	retrograde	-1087 Jul 13 j 14:52	29° \approx 29'26	
minimum elong	-1095 Mar 09 j 15:16	8° \approx 54'08	1°44'04	min. Earth dist.	-1087 Sep 30 j 11:20	28° \approx 05'23	28.80623 AU
max. Earth dist.	-1095 Mar 10 j 14:44	8° \approx 56'21	30.82874 AU	opposition	-1087 Oct 01 j 06:12	28° \approx 04'03	-2°-5'-15
retrograde	-1095 Jun 25 j 07:16	11° \approx 29'16		direct	-1087 Dec 17 j 11:42	26° \approx 40'20	
min. Earth dist.	-1095 Sep 12 j 10:36	10° \approx 05'23	28.82698 AU				
opposition	-1095 Sep 13 j 08:37	10° \approx 03'51	-1°-52'-27	conjunction	-1086 Mar 30 j 17:27	29° \approx 09'54	-1°-57'-30
direct	-1095 Nov 29 j 16:44	8° \approx 40'26		minimum elong	-1086 Mar 30 j 17:27	29° \approx 09'54	1°57'30
				max. Earth dist.	-1086 Mar 31 j 14:20	29° \approx 11'52	30.80546 AU
conjunction	-1094 Mar 12 j 04:38	11° \approx 09'18	-1°-46'-12		-1086 Apr 22 j 08:06	0° \approx	
minimum elong	-1094 Mar 12 j 04:38	11° \approx 09'18	1°46'13	retrograde	-1086 Jul 16 j 05:58	1° \approx 44'52	
max. Earth dist.	-1094 Mar 13 j 03:30	11° \approx 11'27	30.82269 AU	opposition	-1086 Oct 03 j 17:34	0° \approx 19'32	-2°-6'00
retrograde	-1094 Jun 27 j 20:30	13° \approx 44'23		min. Earth dist.	-1086 Oct 02 j 22:31	0° \approx 20'53	28.80744 AU
opposition	-1094 Sep 15 j 20:31	12° \approx 18'55	-1°-54'-41		-1086 Oct 15 j 08:17	30° \approx	
min. Earth dist.	-1094 Sep 14 j 23:53	12° \approx 20'22	28.82099 AU	direct	-1086 Dec 19 j 23:59	28° \approx 55'48	
direct	-1094 Dec 02 j 04:39	10° \approx 55'26			-1085 Feb 21 j 01:16	0° \approx	
conjunction	-1093 Mar 14 j 18:06	13° \approx 24'21	-1°-48'-13	conjunction	-1085 Apr 02 j 07:33	1° \approx 25'30	-1°-58'-7
minimum elong	-1093 Mar 14 j 18:05	13° \approx 24'21	1°48'14	minimum elong	-1085 Apr 02 j 07:33	1° \approx 25'30	1°58'08
max. Earth dist.	-1093 Mar 15 j 17:15	13° \approx 26'32	30.81685 AU	max. Earth dist.	-1085 Apr 03 j 03:34	1° \approx 27'23	30.80637 AU
retrograde	-1093 Jun 30 j 10:38	15° \approx 59'24		retrograde	-1085 Jul 18 j 19:45	4° \approx 00'26	
min. Earth dist.	-1093 Sep 17 j 10:56	14° \approx 35'24	28.81540 AU	min. Earth dist.	-1085 Oct 05 j 11:52	2° \approx 36'22	28.80811 AU
opposition	-1093 Sep 18 j 08:19	14° \approx 33'54	-1°-56'-45	opposition	-1085 Oct 06 j 05:13	2° \approx 35'08	-2°-6'-34

Attention, astronomical year style is used: The year -1085 in astronomical counting style is the year 1086 BCE in historical counting style.

direct	-1085 Dec 22 j 12:11	1°♈11'24		minimum elong	-1076 Apr 22 j 15:24	21°♈42'57	1°55'33
				max. Earth dist.	-1076 Apr 23 j 05:32	21°♈44'16	30.81248 AU
conjunction	-1084 Apr 03 j 21:40	3°♈41'11	-1°-58'-33	retrograde	-1076 Aug 07 j 13:11	24°♈16'55	
minimum elong	-1084 Apr 03 j 21:40	3°♈41'11	1°58'33	opposition	-1076 Oct 25 j 09:42	22°♈51'47	-2°-2'-56
max. Earth dist.	-1084 Apr 04 j 17:15	3°♈43'01	30.80670 AU	min. Earth dist.	-1076 Oct 24 j 21:42	22°♈52'38	28.81663 AU
retrograde	-1084 Jul 20 j 10:07	6°♈16'02		direct	-1075 Jan 10 j 22:55	21°♈27'29	
opposition	-1084 Oct 07 j 16:42	4°♈50'47	-2°-6'-56				
min. Earth dist.	-1084 Oct 06 j 23:09	4°♈52'01	28.80794 AU	conjunction	-1075 Apr 25 j 05:49	23°♈57'52	-1°-54'-21
direct	-1084 Dec 24 j 01:57	3°♈26'59		minimum elong	-1075 Apr 25 j 05:49	23°♈57'52	1°54'22
				max. Earth dist.	-1075 Apr 25 j 19:32	23°♈59'09	30.81851 AU
conjunction	-1083 Apr 06 j 11:54	5°♈56'50	-1°-58'-48	retrograde	-1075 Aug 10 j 02:57	26°♈31'44	
minimum elong	-1083 Apr 06 j 11:54	5°♈56'50	1°58'49	opposition	-1075 Oct 27 j 20:24	25°♈06'41	-2°-1'-34
max. Earth dist.	-1083 Apr 07 j 05:52	5°♈58'31	30.80613 AU	min. Earth dist.	-1075 Oct 27 j 08:08	25°♈07'34	28.82303 AU
retrograde	-1083 Jul 22 j 22:50	8°♈31'37		direct	-1074 Jan 13 j 12:11	23°♈42'23	
opposition	-1083 Oct 10 j 04:07	7°♈06'22	-2°-7'-6				
min. Earth dist.	-1083 Oct 09 j 12:18	7°♈07'29	28.80709 AU	conjunction	-1074 Apr 27 j 20:14	26°♈12'53	-1°-53'00
direct	-1083 Dec 26 j 12:55	5°♈42'30		minimum elong	-1074 Apr 27 j 20:14	26°♈12'53	1°53'00
				max. Earth dist.	-1074 Apr 28 j 08:33	26°♈14'02	30.82525 AU
conjunction	-1082 Apr 09 j 02:18	8°♈12'25	-1°-58'-52	retrograde	-1074 Aug 12 j 16:09	28°♈46'40	
minimum elong	-1082 Apr 09 j 02:18	8°♈12'25	1°58'53	opposition	-1074 Oct 30 j 07:23	27°♈21'43	-2°00'-1
max. Earth dist.	-1082 Apr 09 j 20:24	8°♈14'07	30.80506 AU	min. Earth dist.	-1074 Oct 29 j 20:50	27°♈22'28	28.82997 AU
retrograde	-1082 Jul 25 j 12:11	10°♈47'05		direct	-1073 Jan 15 j 23:00	25°♈57'25	
opposition	-1082 Oct 12 j 15:23	9°♈21'49	-2°-7'-5				
min. Earth dist.	-1082 Oct 11 j 23:43	9°♈22'56	28.80580 AU	conjunction	-1073 Apr 30 j 10:44	28°♈28'01	-1°-51'-27
direct	-1082 Dec 29 j 02:07	7°♈57'53		minimum elong	-1073 Apr 30 j 10:44	28°♈28'01	1°51'28
				max. Earth dist.	-1073 Apr 30 j 23:02	28°♈29'10	30.83220 AU
conjunction	-1081 Apr 11 j 16:21	10°♈27'51	-1°-58'-46		-1073 Jun 13 j 07:32	0°♈	
minimum elong	-1081 Apr 11 j 16:21	10°♈27'51	1°58'47	retrograde	-1073 Aug 15 j 05:56	1°♈01'42	
max. Earth dist.	-1081 Apr 12 j 08:38	10°♈29'22	30.80383 AU		-1073 Oct 19 j 00:11	30°♈	
retrograde	-1081 Jul 28 j 01:05	13°♈02'24		opposition	-1073 Nov 01 j 18:15	29°♈36'50	-1°-58'-17
min. Earth dist.	-1081 Oct 14 j 11:52	11°♈38'10	28.80479 AU	min. Earth dist.	-1073 Nov 01 j 08:02	29°♈37'34	28.83667 AU
opposition	-1081 Oct 15 j 02:38	11°♈37'07	-2°-6'-53	direct	-1072 Jan 18 j 12:25	28°♈12'32	
direct	-1081 Dec 31 j 12:36	10°♈13'05			-1072 Apr 12 j 12:04	0°♈	
conjunction	-1080 Apr 13 j 06:38	12°♈43'06	-1°-58'-29	conjunction	-1072 May 02 j 01:15	0°♈43'14	-1°-49'-45
minimum elong	-1080 Apr 13 j 06:38	12°♈43'06	1°58'29	minimum elong	-1072 May 02 j 01:16	0°♈43'14	1°49'45
max. Earth dist.	-1080 Apr 13 j 23:24	12°♈44'40	30.80309 AU	max. Earth dist.	-1072 May 02 j 11:19	0°♈44'11	30.83869 AU
retrograde	-1080 Jul 29 j 11:35	15°♈17'32		retrograde	-1072 Aug 16 j 19:02	3°♈16'48	
opposition	-1080 Oct 16 j 13:42	13°♈52'15	-2°-6'-29	opposition	-1072 Nov 03 j 05:07	1°♈52'01	-1°-56'-22
min. Earth dist.	-1080 Oct 15 j 23:29	13°♈53'16	28.80443 AU	min. Earth dist.	-1072 Nov 02 j 20:14	1°♈52'39	28.84284 AU
direct	-1079 Jan 02 j 00:59	12°♈28'09		direct	-1071 Jan 19 j 23:17	0°♈27'41	
conjunction	-1079 Apr 15 j 20:47	14°♈58'12	-1°-58'-1	conjunction	-1071 May 04 j 16:02	2°♈58'29	-1°-47'-53
minimum elong	-1079 Apr 15 j 20:47	14°♈58'12	1°58'02	minimum elong	-1071 May 04 j 16:03	2°♈58'29	1°47'53
max. Earth dist.	-1079 Apr 16 j 11:59	14°♈59'38	30.80335 AU	max. Earth dist.	-1071 May 05 j 01:56	2°♈59'24	30.84441 AU
retrograde	-1079 Aug 01 j 00:24	17°♈32'31		retrograde	-1071 Aug 19 j 06:15	5°♈31'54	
min. Earth dist.	-1079 Oct 18 j 10:39	16°♈08'15	28.80530 AU	opposition	-1071 Nov 09 j 16:01	4°♈07'11	-1°-54'-17
opposition	-1079 Oct 19 j 00:45	16°♈07'15	-2°-5'-53	min. Earth dist.	-1071 Nov 05 j 08:11	4°♈07'45	28.84801 AU
direct	-1078 Jan 04 j 11:59	14°♈43'03		direct	-1070 Jan 22 j 12:02	2°♈42'49	
conjunction	-1078 Apr 18 j 11:05	17°♈13'11	-1°-57'-22	conjunction	-1070 May 07 j 06:36	5°♈13'41	-1°-45'-51
minimum elong	-1078 Apr 18 j 11:05	17°♈13'11	1°57'22	minimum elong	-1070 May 07 j 06:36	5°♈13'41	1°45'51
max. Earth dist.	-1078 Apr 19 j 02:34	17°♈14'38	30.80479 AU	max. Earth dist.	-1070 May 07 j 14:12	5°♈14'23	30.84932 AU
retrograde	-1078 Aug 03 j 11:36	19°♈47'22		retrograde	-1070 Aug 21 j 19:05	7°♈46'57	
opposition	-1078 Oct 21 j 11:43	18°♈22'07	-2°-5'-5	opposition	-1070 Nov 08 j 02:43	6°♈22'17	-1°-52'-1
min. Earth dist.	-1078 Oct 20 j 22:46	18°♈23'03	28.80748 AU	min. Earth dist.	-1070 Nov 07 j 19:30	6°♈22'48	28.85260 AU
direct	-1077 Jan 06 j 22:41	16°♈57'53		direct	-1069 Jan 24 j 23:05	4°♈57'51	
conjunction	-1077 Apr 21 j 01:16	19°♈28'05	-1°-56'-33	conjunction	-1069 May 09 j 21:13	7°♈28'46	-1°-43'-39
minimum elong	-1077 Apr 21 j 01:17	19°♈28'05	1°56'33	minimum elong	-1069 May 09 j 21:14	7°♈28'46	1°43'40
max. Earth dist.	-1077 Apr 21 j 15:48	19°♈29'26	30.80789 AU	max. Earth dist.	-1069 May 10 j 04:41	7°♈29'28	30.85372 AU
retrograde	-1077 Aug 06 j 00:57	22°♈02'09		retrograde	-1069 Aug 24 j 05:51	10°♈01'53	
opposition	-1077 Oct 23 j 22:38	20°♈36'57	-2°-4'-7	opposition	-1069 Nov 10 j 13:29	8°♈37'15	-1°-49'-35
min. Earth dist.	-1077 Oct 23 j 09:11	20°♈37'54	28.81133 AU	min. Earth dist.	-1069 Nov 10 j 07:52	8°♈37'39	28.85687 AU
direct	-1076 Jan 09 j 11:04	19°♈12'40		direct	-1068 Jan 27 j 09:45	7°♈12'45	
conjunction	-1076 Apr 22 j 15:24	21°♈42'57	-1°-55'-32	conjunction	-1068 May 11 j 11:35	9°♈43'43	-1°-41'-18

Attention, astronomical year style is used: The year -1068 in astronomical counting style is the year 1069 BCE in historical counting style.

minimum elong	-1068 May 11 j 11:35	9°843'43	1°41'18	minimum elong	-1060 May 30 j 06:24	27°840'08	1°17'23
max. Earth dist.	-1068 May 11 j 17:32	9°844'17	30.85818 AU	max. Earth dist.	-1060 May 30 j 06:05	27°840'06	30.92530 AU
retrograde	-1068 Aug 25 j 17:56	12°816'40			-1060 Aug 17 j 08:22	0°II	
opposition	-1068 Nov 12 j 00:03	10°852'05	-1°-47'00	retrograde	-1060 Sep 12 j 18:37	0°II11'47	
min. Earth dist.	-1068 Nov 11 j 18:24	10°852'29	28.86139 AU		-1060 Oct 09 j 08:39	30°R8	
direct	-1067 Jan 28 j 22:35	9°827'30		opposition	-1060 Nov 29 j 11:56	28°847'51	-1°-20'-50
				min. Earth dist.	-1060 Nov 29 j 13:22	28°847'44	28.93079 AU
conjunction	-1067 May 14 j 02:06	11°858'32	-1°-38'-49	direct	-1059 Feb 15 j 23:30	27°823'05	
minimum elong	-1067 May 14 j 02:07	11°858'32	1°38'48				
max. Earth dist.	-1067 May 14 j 07:24	11°859'01	30.86292 AU	conjunction	-1059 Jun 01 j 20:48	29°854'38	-1°-13'-49
retrograde	-1067 Aug 28 j 04:43	14°831'18		minimum elong	-1059 Jun 01 j 20:48	29°854'38	1°13'48
opposition	-1067 Nov 14 j 10:36	13°806'45	-1°-44'-15	max. Earth dist.	-1059 Jun 01 j 18:25	29°854'25	30.93500 AU
min. Earth dist.	-1067 Nov 14 j 06:40	13°807'02	28.86650 AU		-1059 Jun 04 j 06:30	0°II	
direct	-1066 Jan 31 j 10:28	11°842'07		retrograde	-1059 Sep 15 j 06:12	2°II26'06	
				opposition	-1059 Dec 01 j 22:18	1°II02'15	-1°-16'-58
conjunction	-1066 May 16 j 16:33	14°813'11	-1°-36'-10	min. Earth dist.	-1059 Dec 01 j 23:59	1°II02'08	28.93988 AU
minimum elong	-1066 May 16 j 16:33	14°813'11	1°36'10		-1058 Jan 12 j 01:24	30°R8	
max. Earth dist.	-1066 May 16 j 21:08	14°813'37	30.86861 AU	direct	-1058 Feb 18 j 12:08	29°837'26	
	-1066 Jun 06 j 22:29	15°8			-1058 Mar 27 j 13:17	0°II	
retrograde	-1066 Aug 30 j 17:24	16°845'47					
opposition	-1066 Nov 16 j 21:05	15°821'17	-1°-41'-21	conjunction	-1058 Jun 04 j 11:13	2°II09'02	-1°-10'-8
min. Earth dist.	-1066 Nov 16 j 16:47	15°821'35	28.87265 AU	minimum elong	-1058 Jun 04 j 11:13	2°II09'02	1°10'08
	-1066 Nov 29 j 11:30	15°R8		max. Earth dist.	-1058 Jun 04 j 07:57	2°II08'44	30.94352 AU
direct	-1065 Feb 02 j 23:44	13°856'35		retrograde	-1058 Sep 17 j 16:27	4°II40'19	
	-1065 Apr 07 j 11:42	15°8		opposition	-1058 Dec 04 j 08:54	3°II16'31	-1°-12'-58
				min. Earth dist.	-1058 Dec 04 j 12:35	3°II16'15	28.94791 AU
conjunction	-1065 May 19 j 06:41	16°827'43	-1°-33'-23	direct	-1057 Feb 20 j 23:19	1°II51'39	
minimum elong	-1065 May 19 j 06:41	16°827'43	1°33'23				
max. Earth dist.	-1065 May 19 j 10:09	16°828'03	30.87540 AU	conjunction	-1057 Jun 07 j 01:18	4°II23'16	-1°-6'-21
retrograde	-1065 Sep 02 j 05:38	19°800'09		minimum elong	-1057 Jun 07 j 01:18	4°II23'16	1°06'21
opposition	-1065 Nov 19 j 07:41	17°835'43	-1°-38'-17	max. Earth dist.	-1057 Jun 06 j 20:48	4°II22'51	30.95122 AU
min. Earth dist.	-1065 Nov 19 j 04:46	17°835'55	28.88018 AU	retrograde	-1057 Sep 20 j 04:11	6°II54'21	
direct	-1064 Feb 05 j 10:58	16°810'59		opposition	-1057 Dec 06 j 19:15	5°II30'36	-1°-8'-53
				min. Earth dist.	-1057 Dec 06 j 22:57	5°II30'20	28.95512 AU
conjunction	-1064 May 20 j 21:04	18°842'11	-1°-30'-27	direct	-1056 Feb 23 j 12:22	4°II05'40	
minimum elong	-1064 May 20 j 21:04	18°842'11	1°30'27				
max. Earth dist.	-1064 May 21 j 00:38	18°842'31	30.88371 AU	conjunction	-1056 Jun 08 j 15:28	6°II37'18	-1°-2'-29
retrograde	-1064 Sep 03 j 18:50	21°814'27		minimum elong	-1056 Jun 08 j 15:28	6°II37'18	1°02'30
opposition	-1064 Nov 20 j 18:02	19°850'06	-1°-35'-5	max. Earth dist.	-1056 Jun 08 j 09:30	6°II36'44	30.95820 AU
min. Earth dist.	-1064 Nov 20 j 15:12	19°850'18	28.88905 AU	retrograde	-1056 Sep 21 j 15:08	9°II08'11	
direct	-1063 Feb 07 j 01:09	18°825'21		opposition	-1056 Dec 08 j 05:33	7°II44'27	-1°-4'-42
				min. Earth dist.	-1056 Dec 08 j 11:03	7°II44'04	28.96199 AU
conjunction	-1063 May 23 j 11:21	20°856'38	-1°-27'-23	direct	-1055 Feb 25 j 00:05	6°II19'27	
minimum elong	-1063 May 23 j 11:22	20°856'38	1°27'23				
max. Earth dist.	-1063 May 23 j 13:08	20°856'47	30.89330 AU	conjunction	-1055 Jun 11 j 05:37	8°II51'06	0°-58'-32
retrograde	-1063 Sep 06 j 07:14	23°828'44		minimum elong	-1055 Jun 11 j 05:37	8°II51'06	0°58'31
opposition	-1063 Nov 23 j 04:31	22°804'29	-1°-31'-43	max. Earth dist.	-1055 Jun 10 j 23:22	8°II50'31	30.96508 AU
min. Earth dist.	-1063 Nov 23 j 02:39	22°804'37	28.89919 AU	retrograde	-1055 Sep 24 j 02:52	11°II21'46	
direct	-1062 Feb 09 j 12:32	20°839'44		opposition	-1055 Dec 10 j 15:48	9°II58'06	-1°00'-25
				min. Earth dist.	-1055 Dec 10 j 21:36	9°II57'41	28.96882 AU
conjunction	-1062 May 26 j 01:44	23°811'05	-1°-24'-10	direct	-1054 Feb 27 j 14:32	8°II33'01	
minimum elong	-1062 May 26 j 01:45	23°811'05	1°24'11				
max. Earth dist.	-1062 May 26 j 03:45	23°811'16	30.90385 AU	conjunction	-1054 Jun 13 j 19:23	11°II04'41	0°-54'-29
retrograde	-1062 Sep 08 j 18:49	25°843'03		minimum elong	-1054 Jun 13 j 19:24	11°II04'41	0°54'29
opposition	-1062 Nov 25 j 14:56	24°818'54	-1°-28'-14	max. Earth dist.	-1054 Jun 13 j 11:25	11°II03'57	30.97215 AU
min. Earth dist.	-1062 Nov 25 j 13:58	24°818'58	28.90987 AU	retrograde	-1054 Sep 26 j 14:28	13°II35'10	
direct	-1061 Feb 12 j 01:13	22°854'10		opposition	-1054 Dec 13 j 02:03	12°II11'32	0°-56'-4
				min. Earth dist.	-1054 Dec 13 j 08:44	12°II11'03	28.97631 AU
conjunction	-1061 May 28 j 16:00	25°825'36	-1°-20'-50	direct	-1053 Mar 02 j 02:16	10°II46'24	
minimum elong	-1061 May 28 j 16:00	25°825'36	1°20'50				
max. Earth dist.	-1061 May 28 j 15:52	25°825'35	30.91476 AU	conjunction	-1053 Jun 16 j 09:14	13°II18'05	0°-50'-22
retrograde	-1061 Sep 11 j 08:16	27°857'24		minimum elong	-1053 Jun 16 j 09:15	13°II18'05	0°50'22
opposition	-1061 Nov 28 j 01:21	26°833'22	-1°-24'-36	max. Earth dist.	-1053 Jun 16 j 01:38	13°II17'23	30.98008 AU
min. Earth dist.	-1061 Nov 28 j 00:57	26°833'24	28.92072 AU	retrograde	-1053 Sep 29 j 01:26	15°II48'22	
direct	-1060 Feb 14 j 12:22	25°808'37		opposition	-1053 Dec 15 j 12:14	14°II24'48	0°-51'-37
				min. Earth dist.	-1053 Dec 15 j 19:34	14°II24'16	28.98472 AU
conjunction	-1060 May 30 j 06:24	27°840'08	-1°-17'-23	direct	-1052 Mar 03 j 15:26	12°II59'38	

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Attention, astronomical year style is used: The year -1052 in astronomical counting style is the year 1053 BCE in historical counting style.

conjunction	-1052 Jun 17 j 22:50	15°II31'21	0°-46'-11	direct	-1044 Mar 21 j 12:59	0°☾45'05	
minimum elong	-1052 Jun 17 j 22:50	15°II31'21	0°46'11				
max. Earth dist.	-1052 Jun 17 j 13:24	15°II30'29	30.98920 AU	conjunction	-1044 Jul 06 j 10:43	3°☾17'06	0°-10'-49
retrograde	-1052 Sep 30 j 14:16	18°II01'27		minimum elong	-1044 Jul 06 j 10:42	3°☾17'06	0°10'49
opposition	-1052 Dec 16 j 22:24	16°II37'57	0°-47'-7	behind sun begin	-1044 Jul 06 j 05:45	3°☾16'39	
min. Earth dist.	-1052 Dec 17 j 05:48	16°II37'26	28.99449 AU	behind sun end	-1044 Jul 06 j 15:40	3°☾17'32	
direct	-1051 Mar 06 j 03:13	15°II12'46		max. Earth dist.	-1044 Jul 05 j 19:21	3°☾15'41	31.07693 AU
				retrograde	-1044 Oct 18 j 04:04	5°☾45'57	
conjunction	-1051 Jun 20 j 12:36	17°II44'32	0°-41'-55	opposition	-1043 Jan 03 j 08:33	4°☾23'09	0°-9'-7
minimum elong	-1051 Jun 20 j 12:36	17°II44'32	0°41'55	min. Earth dist.	-1043 Jan 03 j 22:56	4°☾22'08	29.08117 AU
max. Earth dist.	-1051 Jun 20 j 03:33	17°II43'42	30.99959 AU	direct	-1043 Mar 24 j 03:01	2°☾57'54	
retrograde	-1051 Oct 02 j 23:55	20°II14'29					
opposition	-1051 Dec 19 j 08:38	18°II51'05	0°-42'-32	conjunction	-1043 Jul 08 j 23:43	5°☾29'52	0°-6'-17
min. Earth dist.	-1051 Dec 19 j 17:22	18°II50'28	29.00544 AU	minimum elong	-1043 Jul 08 j 23:43	5°☾29'52	0°06'16
direct	-1050 Mar 08 j 14:34	17°II25'55		behind sun begin	-1043 Jul 08 j 17:30	5°☾29'19	
				behind sun end	-1043 Jul 09 j 05:56	5°☾30'25	
conjunction	-1050 Jun 23 j 02:08	19°II57'44	0°-37'-36	max. Earth dist.	-1043 Jul 08 j 06:22	5°☾28'17	31.08512 AU
minimum elong	-1050 Jun 23 j 02:08	19°II57'44	0°37'37	retrograde	-1043 Oct 20 j 16:23	7°☾58'32	
max. Earth dist.	-1050 Jun 22 j 15:40	19°II56'46	31.01125 AU	opposition	-1042 Jan 05 j 18:42	6°☾35'46	0°-4'-16
retrograde	-1050 Oct 05 j 11:10	22°II27'32		min. Earth dist.	-1042 Jan 06 j 09:17	6°☾34'44	29.08927 AU
opposition	-1050 Dec 21 j 18:48	21°II04'15	0°-37'-53	direct	-1042 Mar 26 j 16:03	5°☾10'27	
min. Earth dist.	-1050 Dec 22 j 03:14	21°II03'39	29.01749 AU				
direct	-1049 Mar 11 j 02:26	19°II39'06		conjunction	-1042 Jul 11 j 12:43	7°☾42'24	0°-1'-44
				minimum elong	-1042 Jul 11 j 12:43	7°☾42'24	0°01'44
conjunction	-1049 Jun 25 j 15:35	22°II10'58	0°-33'-14	behind sun begin	-1042 Jul 11 j 06:08	7°☾41'49	
minimum elong	-1049 Jun 25 j 15:35	22°II10'58	0°33'13	behind sun end	-1042 Jul 11 j 19:18	7°☾42'59	
max. Earth dist.	-1049 Jun 25 j 04:57	22°II10'00	31.02353 AU	max. Earth dist.	-1042 Jul 10 j 19:46	7°☾40'51	31.09315 AU
retrograde	-1049 Oct 07 j 21:14	24°II40'39		retrograde	-1042 Oct 23 j 01:21	10°☾10'53	
opposition	-1049 Dec 24 j 05:07	23°II17'29	0°-33'-10	asc. node	-1042 Nov 25 j 03:31	9°☾52'45	
min. Earth dist.	-1049 Dec 24 j 15:19	23°II16'46	29.02991 AU	opposition	-1041 Jan 08 j 05:02	8°☾48'07	0°00'35
direct	-1048 Mar 12 j 12:28	21°II52'21		min. Earth dist.	-1041 Jan 08 j 20:59	8°☾47'00	29.09743 AU
				direct	-1041 Mar 29 j 04:31	7°☾22'46	
conjunction	-1048 Jun 27 j 05:08	24°II24'17	0°-28'-48	max. Earth dist.	-1041 Jul 13 j 07:04	9°☾52'59	31.10162 AU
minimum elong	-1048 Jun 27 j 05:08	24°II24'17	0°28'49				
max. Earth dist.	-1048 Jun 26 j 17:22	24°II23'12	31.03594 AU	conjunction	-1041 Jul 14 j 01:18	9°☾54'40	0°02'55
retrograde	-1048 Oct 09 j 08:27	26°II53'49		minimum elong	-1041 Jul 14 j 01:17	9°☾54'40	0°02'57
opposition	-1048 Dec 25 j 15:13	25°II30'46	0°-28'-25	behind sun begin	-1041 Jul 13 j 18:44	9°☾54'05	
min. Earth dist.	-1048 Dec 26 j 01:25	25°II30'03	29.04199 AU	behind sun end	-1041 Jul 14 j 07:50	9°☾55'15	
direct	-1047 Mar 15 j 00:17	24°II05'38		retrograde	-1041 Oct 25 j 12:13	12°☾22'57	
				opposition	-1040 Jan 10 j 15:11	11°☾00'14	0°05'26
conjunction	-1047 Jun 29 j 18:42	26°II37'37	0°-24'-21	min. Earth dist.	-1040 Jan 11 j 06:37	10°☾59'09	29.10625 AU
minimum elong	-1047 Jun 29 j 18:42	26°II37'37	0°24'20	direct	-1040 Mar 30 j 16:58	9°☾34'50	
max. Earth dist.	-1047 Jun 29 j 05:35	26°II36'24	31.04761 AU				
retrograde	-1047 Oct 11 j 18:51	29°II07'00		conjunction	-1040 Jul 15 j 14:01	12°☾06'43	0°07'27
opposition	-1047 Dec 28 j 01:39	27°II44'02	0°-23'-38	minimum elong	-1040 Jul 15 j 14:00	12°☾06'43	0°07'27
min. Earth dist.	-1047 Dec 28 j 13:34	27°II43'12	29.05330 AU	behind sun begin	-1040 Jul 15 j 08:02	12°☾06'11	
direct	-1046 Mar 17 j 11:49	26°II18'54		behind sun end	-1040 Jul 15 j 19:59	12°☾07'15	
				max. Earth dist.	-1040 Jul 14 j 19:57	12°☾05'03	31.11080 AU
conjunction	-1046 Jul 02 j 08:06	28°II50'54	0°-19'-51	retrograde	-1040 Oct 26 j 21:41	14°☾34'50	
minimum elong	-1046 Jul 02 j 08:06	28°II50'54	0°19'52	opposition	-1039 Jan 12 j 01:25	13°☾12'09	0°10'17
max. Earth dist.	-1046 Jul 01 j 18:34	28°II49'39	31.05840 AU	min. Earth dist.	-1039 Jan 12 j 18:09	13°☾10'59	29.11606 AU
	-1046 Aug 03 j 11:35	0°☾		direct	-1039 Apr 02 j 03:34	11°☾46'44	
retrograde	-1046 Oct 14 j 05:48	1°☾20'08		max. Earth dist.	-1039 Jul 17 j 07:58	14°☾16'52	31.12127 AU
	-1046 Dec 28 j 20:41	30°☾II					
opposition	-1046 Dec 30 j 11:59	29°II57'14	0°-18'-49	conjunction	-1039 Jul 18 j 02:35	14°☾18'35	0°11'57
min. Earth dist.	-1046 Dec 31 j 00:20	29°II56'22	29.06347 AU	minimum elong	-1039 Jul 18 j 02:34	14°☾18'35	0°11'58
direct	-1045 Mar 20 j 01:44	28°II32'05		behind sun begin	-1039 Jul 17 j 22:07	14°☾18'12	
	-1045 Jun 05 j 04:48	0°☾		behind sun end	-1039 Jul 18 j 07:01	14°☾18'59	
				retrograde	-1039 Oct 29 j 07:43	16°☾46'33	
conjunction	-1045 Jul 04 j 21:22	1°☾04'05	0°-15'-20	opposition	-1038 Jan 14 j 11:40	15°☾23'57	0°15'06
minimum elong	-1045 Jul 04 j 21:23	1°☾04'05	0°15'20	min. Earth dist.	-1038 Jan 15 j 03:42	15°☾22'49	29.12710 AU
behind sun begin	-1045 Jul 04 j 19:46	1°☾03'57		direct	-1038 Apr 04 j 15:37	13°☾58'32	
behind sun end	-1045 Jul 04 j 23:00	1°☾04'14					
max. Earth dist.	-1045 Jul 04 j 05:57	1°☾02'40	31.06808 AU	conjunction	-1038 Jul 20 j 14:54	16°☾30'23	0°16'27
retrograde	-1045 Oct 16 j 17:13	3°☾33'09		minimum elong	-1038 Jul 20 j 14:54	16°☾30'23	0°16'27
opposition	-1044 Jan 01 j 22:13	2°☾10'18	0°-13'-58	max. Earth dist.	-1038 Jul 19 j 19:49	16°☾28'37	31.13288 AU
min. Earth dist.	-1044 Jan 02 j 11:37	2°☾09'21	29.07278 AU	retrograde	-1038 Oct 31 j 17:14	18°☾58'14	

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Attention, astronomical year style is used: The year -1037 in astronomical counting style is the year 1038 BCE in historical counting style.

opposition	-1037 Jan 16 j 22:01	17° \mathring{E} 35'43	0°19'54	opposition	-1029 Feb 03 j 09:57	5° \mathring{O} 10'17	0°56'38
min. Earth dist.	-1037 Jan 17 j 15:05	17° \mathring{E} 34'31	29.13934 AU	min. Earth dist.	-1029 Feb 04 j 06:49	5° \mathring{O} 08'50	29.22139 AU
direct	-1037 Apr 07 j 02:09	16° \mathring{E} 10'20		direct	-1029 Apr 25 j 03:59	3° \mathring{O} 45'01	
max. Earth dist.	-1037 Jul 22 j 08:28	18° \mathring{E} 40'26	31.14555 AU	max. Earth dist.	-1029 Aug 09 j 04:01	6° \mathring{O} 14'32	31.22433 AU
conjunction	-1037 Jul 23 j 03:20	18° \mathring{E} 42'11	0°20'56	conjunction	-1029 Aug 10 j 03:53	6° \mathring{O} 16'45	0°55'04
minimum elong	-1037 Jul 23 j 03:19	18° \mathring{E} 42'11	0°20'57	minimum elong	-1029 Aug 10 j 03:53	6° \mathring{O} 16'45	0°55'05
retrograde	-1037 Nov 03 j 03:21	21° \mathring{E} 09'55		retrograde	-1029 Nov 20 j 14:17	8° \mathring{O} 43'37	
opposition	-1036 Jan 19 j 08:12	19° \mathring{E} 47'30	0°24'41	opposition	-1028 Feb 05 j 20:27	7° \mathring{O} 21'38	1°00'54
min. Earth dist.	-1036 Jan 20 j 01:22	19° \mathring{E} 46'18	29.15217 AU	min. Earth dist.	-1028 Feb 06 j 18:19	7° \mathring{O} 20'07	29.22843 AU
direct	-1036 Apr 08 j 14:32	18° \mathring{E} 22'10		direct	-1028 Apr 26 j 14:33	5° \mathring{O} 56'21	
conjunction	-1036 Jul 24 j 15:40	20° \mathring{E} 54'03	0°25'23	conjunction	-1028 Aug 11 j 15:25	8° \mathring{O} 28'01	0°59'01
minimum elong	-1036 Jul 24 j 15:40	20° \mathring{E} 54'03	0°25'23	minimum elong	-1028 Aug 11 j 15:25	8° \mathring{O} 28'01	0°59'01
max. Earth dist.	-1036 Jul 23 j 19:27	20° \mathring{E} 52'11	31.15843 AU	max. Earth dist.	-1028 Aug 10 j 16:02	8° \mathring{O} 25'51	31.23147 AU
retrograde	-1036 Nov 04 j 14:50	23° \mathring{E} 21'42		retrograde	-1028 Nov 21 j 23:15	10° \mathring{O} 54'47	
opposition	-1035 Jan 20 j 18:36	21° \mathring{E} 59'22	0°29'25	opposition	-1027 Feb 07 j 07:05	9° \mathring{O} 32'48	1°05'05
min. Earth dist.	-1035 Jan 21 j 12:26	21° \mathring{E} 58'08	29.16505 AU	min. Earth dist.	-1027 Feb 08 j 04:40	9° \mathring{O} 31'19	29.23579 AU
direct	-1035 Apr 11 j 00:54	20° \mathring{E} 34'04		direct	-1027 Apr 29 j 02:28	8° \mathring{O} 07'31	
max. Earth dist.	-1035 Jul 26 j 08:16	23° \mathring{E} 04'09	31.17093 AU	max. Earth dist.	-1027 Aug 13 j 02:30	10° \mathring{O} 36'53	31.23916 AU
conjunction	-1035 Jul 27 j 04:04	23° \mathring{E} 05'59	0°29'47	conjunction	-1027 Aug 14 j 02:40	10° \mathring{O} 39'08	1°02'53
minimum elong	-1035 Jul 27 j 04:04	23° \mathring{E} 05'59	0°29'49	minimum elong	-1027 Aug 14 j 02:40	10° \mathring{O} 39'08	1°02'55
retrograde	-1035 Nov 07 j 01:26	25° \mathring{E} 33'32		retrograde	-1027 Nov 24 j 09:58	13° \mathring{O} 05'49	
opposition	-1034 Jan 23 j 05:07	24° \mathring{E} 11'18	0°34'06	opposition	-1026 Feb 09 j 17:48	11° \mathring{O} 43'52	1°09'10
min. Earth dist.	-1034 Jan 23 j 23:51	24° \mathring{E} 10'00	29.17713 AU	min. Earth dist.	-1026 Feb 10 j 15:18	11° \mathring{O} 42'22	29.24410 AU
direct	-1034 Apr 13 j 14:24	22° \mathring{E} 46'03		direct	-1026 May 01 j 12:33	10° \mathring{O} 18'35	
conjunction	-1034 Jul 29 j 16:16	25° \mathring{E} 17'57	0°34'09	conjunction	-1026 Aug 16 j 14:01	12° \mathring{O} 50'09	1°06'40
minimum elong	-1034 Jul 29 j 16:16	25° \mathring{E} 17'57	0°34'10	minimum elong	-1026 Aug 16 j 14:00	12° \mathring{O} 50'09	1°06'40
max. Earth dist.	-1034 Jul 28 j 18:38	25° \mathring{E} 15'57	31.18254 AU	max. Earth dist.	-1026 Aug 15 j 14:59	12° \mathring{O} 48'00	31.24790 AU
retrograde	-1034 Nov 09 j 14:00	27° \mathring{E} 45'25		retrograde	-1026 Oct 26 j 12:57	15° \mathring{O}	
opposition	-1033 Jan 25 j 15:37	26° \mathring{E} 23'15	0°38'45	retrograde	-1026 Nov 26 j 19:44	15° \mathring{O} 16'46	
min. Earth dist.	-1033 Jan 26 j 10:22	26° \mathring{E} 21'57	29.18830 AU	retrograde	-1026 Dec 28 j 18:52	15° \mathring{R} \mathring{O}	
direct	-1033 Apr 16 j 02:57	24° \mathring{E} 58'01		opposition	-1025 Feb 12 j 04:30	13° \mathring{O} 54'51	1°13'09
max. Earth dist.	-1033 Jul 31 j 07:10	27° \mathring{E} 27'57	31.19297 AU	min. Earth dist.	-1025 Feb 13 j 02:16	13° \mathring{O} 53'21	29.25329 AU
conjunction	-1033 Aug 01 j 04:28	27° \mathring{E} 29'55	0°38'28	direct	-1025 May 04 j 01:40	12° \mathring{O} 29'37	
minimum elong	-1033 Aug 01 j 04:28	27° \mathring{E} 29'55	0°38'30	max. Earth dist.	-1025 Aug 18 j 00:56	14° \mathring{O} 58'54	31.25750 AU
retrograde	-1033 Nov 11 j 23:20	29° \mathring{E} 57'17		retrograde	-1025 Aug 18 j 12:46	15° \mathring{O}	
opposition	-1032 Jan 28 j 02:16	28° \mathring{E} 35'11	0°43'20	conjunction	-1025 Aug 19 j 01:03	15° \mathring{O} 01'08	1°10'21
min. Earth dist.	-1032 Jan 28 j 22:34	28° \mathring{E} 33'46	29.19810 AU	minimum elong	-1025 Aug 19 j 01:02	15° \mathring{O} 01'08	1°10'22
direct	-1032 Apr 17 j 15:25	27° \mathring{E} 09'57		retrograde	-1025 Nov 29 j 07:45	17° \mathring{O} 27'42	
conjunction	-1032 Aug 02 j 16:32	29° \mathring{E} 41'50	0°42'43	opposition	-1024 Feb 14 j 15:11	16° \mathring{O} 05'50	1°17'01
minimum elong	-1032 Aug 02 j 16:32	29° \mathring{E} 41'50	0°42'43	min. Earth dist.	-1024 Feb 15 j 12:20	16° \mathring{O} 04'23	29.26318 AU
max. Earth dist.	-1032 Aug 01 j 17:43	29° \mathring{E} 39'43	31.20217 AU	direct	-1024 Mar 31 j 03:00	15° \mathring{R} \mathring{O}	
retrograde	-1032 Aug 10 j 20:23	0° \mathring{O}		direct	-1024 May 05 j 13:34	14° \mathring{O} 40'39	
retrograde	-1032 Nov 13 j 10:27	2° \mathring{O} 09'04		retrograde	-1024 Jun 09 j 11:19	15° \mathring{O}	
opposition	-1031 Jan 29 j 12:42	0° \mathring{O} 47'01	0°47'50	conjunction	-1024 Aug 20 j 12:17	17° \mathring{O} 12'10	1°13'55
min. Earth dist.	-1031 Jan 30 j 08:40	0° \mathring{O} 45'38	29.20671 AU	minimum elong	-1024 Aug 20 j 12:17	17° \mathring{O} 12'10	1°13'55
direct	-1031 Feb 28 j 10:10	30° \mathring{R} \mathring{E}		max. Earth dist.	-1024 Aug 19 j 13:07	17° \mathring{O} 10'00	31.26738 AU
direct	-1031 Apr 20 j 04:13	29° \mathring{E} 21'47		retrograde	-1024 Nov 30 j 17:09	19° \mathring{O} 38'41	
max. Earth dist.	-1031 Jun 08 j 13:44	0° \mathring{O}		opposition	-1023 Feb 16 j 02:02	18° \mathring{O} 16'52	1°20'47
max. Earth dist.	-1031 Aug 04 j 05:48	1° \mathring{O} 51'32	31.21016 AU	min. Earth dist.	-1023 Feb 17 j 00:19	18° \mathring{O} 15'20	29.27304 AU
conjunction	-1031 Aug 05 j 04:37	1° \mathring{O} 53'39	0°46'55	direct	-1023 May 08 j 01:18	16° \mathring{O} 51'45	
minimum elong	-1031 Aug 05 j 04:36	1° \mathring{O} 53'39	0°46'56	conjunction	-1023 Aug 22 j 23:20	19° \mathring{O} 23'13	1°17'23
retrograde	-1031 Nov 15 j 20:19	4° \mathring{O} 20'45		minimum elong	-1023 Aug 22 j 23:19	19° \mathring{O} 23'13	1°17'24
opposition	-1030 Jan 31 j 23:25	2° \mathring{O} 58'44	0°52'17	max. Earth dist.	-1023 Aug 21 j 23:15	19° \mathring{O} 20'59	31.27707 AU
min. Earth dist.	-1030 Feb 01 j 20:51	2° \mathring{O} 57'15	29.21436 AU	retrograde	-1023 Dec 03 j 04:53	21° \mathring{O} 49'41	
direct	-1030 Apr 22 j 15:21	1° \mathring{O} 33'30		opposition	-1022 Feb 18 j 12:56	20° \mathring{O} 27'57	1°24'26
conjunction	-1030 Aug 07 j 16:15	4° \mathring{O} 05'17	0°51'02	min. Earth dist.	-1022 Feb 19 j 10:27	20° \mathring{O} 26'28	29.28242 AU
minimum elong	-1030 Aug 07 j 16:14	4° \mathring{O} 05'17	0°51'02	direct	-1022 May 10 j 14:27	19° \mathring{O} 02'52	
max. Earth dist.	-1030 Aug 06 j 16:53	4° \mathring{O} 03'07	31.21748 AU	max. Earth dist.	-1022 Aug 24 j 10:35	21° \mathring{O} 32'06	31.28584 AU
retrograde	-1030 Nov 18 j 05:36	6° \mathring{O} 32'16		conjunction	-1022 Aug 25 j 10:18	21° \mathring{O} 34'18	1°20'45

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 25

Attention, astronomical year style is used: The year -1022 in astronomical counting style is the year 1023 BCE in historical counting style.

minimum elong	-1022 Aug 25 j 10:18	21°034'18	1°20'44	conjunction	-1014 Sep 11 j 22:49	8°059'35	1°43'00
retrograde	-1022 Dec 05 j 15:15	24°000'45		minimum elong	-1014 Sep 11 j 22:49	8°059'34	1°42'59
opposition	-1021 Feb 21 j 00:03	22°039'02	1°27'57	max. Earth dist.	-1014 Sep 10 j 23:02	8°057'21	31.31909 AU
min. Earth dist.	-1021 Feb 21 j 22:49	22°037'28	29.29076 AU	retrograde	-1014 Dec 22 j 22:17	11°025'43	
direct	-1021 May 13 j 02:11	21°014'00		opposition	-1013 Mar 10 j 17:11	10°003'56	1°51'09
				min. Earth dist.	-1013 Mar 11 j 14:37	10°002'29	29.32245 AU
conjunction	-1021 Aug 27 j 21:17	23°045'23	1°23'59	direct	-1013 May 31 j 01:21	8°039'00	
minimum elong	-1021 Aug 27 j 21:16	23°045'23	1°24'00	max. Earth dist.	-1013 Sep 13 j 10:03	11°007'39	31.32350 AU
max. Earth dist.	-1021 Aug 26 j 21:07	23°043'08	31.29350 AU				
retrograde	-1021 Dec 08 j 00:39	26°011'45		conjunction	-1013 Sep 14 j 08:56	11°009'47	1°45'09
opposition	-1020 Feb 23 j 10:55	24°050'05	1°31'21	minimum elong	-1013 Sep 14 j 08:56	11°009'47	1°45'09
min. Earth dist.	-1020 Feb 24 j 09:09	24°048'33	29.29767 AU	retrograde	-1013 Dec 25 j 08:53	13°035'56	
direct	-1020 May 14 j 15:07	23°025'04		opposition	-1012 Mar 12 j 04:24	12°014'11	1°53'22
max. Earth dist.	-1020 Aug 28 j 07:28	25°054'05	31.29959 AU	min. Earth dist.	-1012 Mar 13 j 02:26	12°012'41	29.32732 AU
				direct	-1012 Jun 01 j 12:56	10°049'19	
conjunction	-1020 Aug 29 j 08:16	25°056'24	1°27'06	conjunction	-1012 Sep 15 j 18:57	13°020'03	1°47'09
minimum elong	-1020 Aug 29 j 08:15	25°056'24	1°27'06	minimum elong	-1012 Sep 15 j 18:57	13°020'03	1°47'08
retrograde	-1020 Dec 09 j 09:56	28°022'44		max. Earth dist.	-1012 Sep 14 j 20:30	13°017'57	31.32870 AU
opposition	-1019 Feb 24 j 22:07	27°001'03	1°34'37	retrograde	-1012 Dec 26 j 18:14	15°046'14	
min. Earth dist.	-1019 Feb 25 j 21:16	26°059'28	29.30318 AU	opposition	-1011 Mar 14 j 15:46	14°024'31	1°55'26
direct	-1019 May 17 j 01:43	25°036'03		min. Earth dist.	-1011 Mar 15 j 12:34	14°023'06	29.33259 AU
				direct	-1011 Jun 04 j 01:34	12°059'44	
conjunction	-1019 Aug 31 j 19:03	28°007'18	1°30'05	max. Earth dist.	-1011 Sep 17 j 06:22	15°028'20	31.33393 AU
minimum elong	-1019 Aug 31 j 19:03	28°007'18	1°30'06				
max. Earth dist.	-1019 Aug 30 j 18:44	28°005'02	31.30434 AU	conjunction	-1011 Sep 18 j 04:47	15°030'25	1°48'59
	-1019 Oct 28 j 00:17	0°000'00		minimum elong	-1011 Sep 18 j 04:47	15°030'25	1°49'00
retrograde	-1019 Dec 11 j 18:43	0°033'35		retrograde	-1011 Dec 29 j 03:49	17°056'40	
	-1018 Jan 27 j 03:58	30°000'00		opposition	-1010 Mar 17 j 03:20	16°034'59	1°57'19
opposition	-1018 Feb 27 j 09:18	29°011'55	1°37'44	min. Earth dist.	-1010 Mar 18 j 00:27	16°033'32	29.33783 AU
min. Earth dist.	-1018 Feb 28 j 08:20	29°010'20	29.30721 AU	direct	-1010 Jun 06 j 11:53	15°010'16	
direct	-1018 May 19 j 13:56	27°046'55					
	-1018 Aug 26 j 03:27	0°000'00		conjunction	-1010 Sep 20 j 14:45	17°040'55	1°50'41
max. Earth dist.	-1018 Sep 02 j 04:25	0°015'43	31.30780 AU	minimum elong	-1010 Sep 20 j 14:44	17°040'55	1°50'41
				max. Earth dist.	-1010 Sep 19 j 17:21	17°038'55	31.33888 AU
conjunction	-1018 Sep 03 j 05:41	0°018'04	1°32'57	retrograde	-1010 Dec 31 j 12:46	20°007'12	
minimum elong	-1018 Sep 03 j 05:41	0°018'04	1°32'57	opposition	-1009 Mar 19 j 14:48	18°045'32	1°59'02
retrograde	-1018 Dec 14 j 05:15	2°044'19		min. Earth dist.	-1009 Mar 20 j 11:33	18°044'07	29.34234 AU
opposition	-1017 Mar 01 j 20:22	1°022'37	1°40'43	direct	-1009 Jun 08 j 23:36	17°020'53	
min. Earth dist.	-1017 Mar 02 j 19:26	1°021'02	29.31036 AU	max. Earth dist.	-1009 Sep 22 j 02:29	19°049'24	31.34287 AU
	-1017 May 09 j 18:34	30°000'00					
direct	-1017 May 22 j 00:14	29°057'36		conjunction	-1009 Sep 23 j 00:36	19°051'28	1°52'13
	-1017 Jun 03 j 07:00	0°000'00		minimum elong	-1009 Sep 23 j 00:36	19°051'28	1°52'13
conjunction	-1017 Sep 05 j 16:16	2°028'40	1°35'40	retrograde	-1008 Jan 02 j 23:42	22°017'49	
minimum elong	-1017 Sep 05 j 16:16	2°028'40	1°35'41	opposition	-1008 Mar 21 j 02:27	20°056'09	2°00'36
max. Earth dist.	-1017 Sep 04 j 16:08	2°026'25	31.31050 AU	min. Earth dist.	-1008 Mar 21 j 22:57	20°054'46	29.34585 AU
retrograde	-1017 Dec 16 j 14:19	4°054'52		direct	-1008 Jun 10 j 09:52	19°031'34	
opposition	-1016 Mar 03 j 07:34	3°033'08	1°43'33				
min. Earth dist.	-1016 Mar 04 j 06:58	3°031'32	29.31278 AU	conjunction	-1008 Sep 24 j 10:33	22°002'04	1°53'35
direct	-1016 May 23 j 13:08	2°008'07		minimum elong	-1008 Sep 24 j 10:33	22°002'04	1°53'34
max. Earth dist.	-1016 Sep 06 j 01:32	4°036'46	31.31284 AU	max. Earth dist.	-1008 Sep 23 j 13:40	22°000'07	31.34562 AU
				retrograde	-1007 Jan 04 j 08:34	24°028'27	
conjunction	-1016 Sep 07 j 02:33	4°039'06	1°38'15	opposition	-1007 Mar 23 j 14:15	23°006'47	2°01'58
minimum elong	-1016 Sep 07 j 02:32	4°039'06	1°38'15	min. Earth dist.	-1007 Mar 24 j 11:01	23°005'22	29.34788 AU
retrograde	-1016 Dec 18 j 01:43	7°005'15		direct	-1007 Jun 12 j 21:55	21°042'14	
opposition	-1015 Mar 05 j 18:39	5°043'29	1°46'15				
min. Earth dist.	-1015 Mar 06 j 17:05	5°041'57	29.31530 AU	conjunction	-1007 Sep 26 j 20:19	24°012'39	1°54'48
direct	-1015 May 26 j 00:36	4°018'28		minimum elong	-1007 Sep 26 j 20:19	24°012'39	1°54'48
				max. Earth dist.	-1007 Sep 25 j 22:33	24°010'37	31.34701 AU
conjunction	-1015 Sep 09 j 12:52	6°049'23	1°40'42	retrograde	-1006 Jan 06 j 20:07	26°039'04	
minimum elong	-1015 Sep 09 j 12:52	6°049'23	1°40'42	opposition	-1006 Mar 26 j 02:00	25°017'21	2°03'11
max. Earth dist.	-1015 Sep 08 j 13:15	6°047'11	31.31551 AU	min. Earth dist.	-1006 Mar 26 j 21:47	25°016'01	29.34864 AU
retrograde	-1015 Dec 20 j 10:55	9°015'31		direct	-1006 Jun 15 j 08:21	23°052'49	
opposition	-1014 Mar 08 j 06:01	7°053'44	1°48'47	max. Earth dist.	-1006 Sep 28 j 09:26	26°021'13	31.34702 AU
min. Earth dist.	-1014 Mar 09 j 04:57	7°052'10	29.31840 AU				
direct	-1014 May 28 j 12:11	6°028'45		conjunction	-1006 Sep 29 j 06:04	26°023'08	1°55'51
				minimum elong	-1006 Sep 29 j 06:04	26°023'08	1°55'50

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Attention, astronomical year style is used: The year -1005 in astronomical counting style is the year 1006 BCE in historical counting style.

retrograde	-1005 Jan 09 j 05:36	28° 17 49'35		retrograde	-997 Jan 26 j 15:55	16° 16 10'22	
opposition	-1005 Mar 28 j 13:52	27° 17 27'49	2°04'13	opposition	-997 Apr 15 j 13:20	14° 16 48'22	2°06'05
min. Earth dist.	-1005 Mar 29 j 10:24	27° 17 26'26	29.34804 AU	min. Earth dist.	-997 Apr 16 j 03:27	14° 16 47'25	29.34603 AU
direct	-1005 Jun 17 j 19:53	26° 17 03'18		direct	-997 Jul 05 j 16:44	13° 16 24'15	
conjunction	-1005 Oct 01 j 15:40	28° 17 33'30	1°56'44	conjunction	-997 Oct 18 j 17:59	15° 16 53'46	1°57'48
minimum elong	-1005 Oct 01 j 15:40	28° 17 33'30	1°56'44	minimum elong	-997 Oct 18 j 17:59	15° 16 53'46	1°57'47
max. Earth dist.	-1005 Sep 30 j 18:47	28° 17 31'33	31.34599 AU	max. Earth dist.	-997 Oct 18 j 03:33	15° 16 52'24	31.34476 AU
	-1005 Nov 11 j 16:23	0° 16		retrograde	-996 Jan 29 j 02:07	18° 16 20'49	
retrograde	-1004 Jan 11 j 17:06	0° 16 59'56		opposition	-996 Apr 17 j 01:37	16° 16 58'49	2°05'30
	-1004 Mar 16 j 11:12	30° 16 R 17		min. Earth dist.	-996 Apr 17 j 16:16	16° 16 57'50	29.34601 AU
opposition	-1004 Mar 30 j 01:29	29° 17 38'07	2°05'05	direct	-996 Jul 07 j 03:33	15° 16 34'47	
min. Earth dist.	-1004 Mar 30 j 20:40	29° 17 36'49	29.34656 AU				
direct	-1004 Jun 19 j 09:22	28° 17 13'36		conjunction	-996 Oct 20 j 03:13	18° 16 04'14	1°57'10
	-1004 Sep 13 j 08:16	0° 16		minimum elong	-996 Oct 20 j 03:13	18° 16 04'14	1°57'09
max. Earth dist.	-1004 Oct 02 j 05:11	0° 16 41'49	31.34421 AU	max. Earth dist.	-996 Oct 19 j 12:50	18° 16 02'53	31.34425 AU
conjunction	-1004 Oct 03 j 01:14	0° 16 43'41	1°57'27	retrograde	-995 Jan 30 j 14:32	20° 16 31'25	
minimum elong	-1004 Oct 03 j 01:14	0° 16 43'41	1°57'26	opposition	-995 Apr 19 j 13:58	19° 16 09'24	2°04'45
retrograde	-1003 Jan 13 j 03:50	3° 16 10'09		min. Earth dist.	-995 Apr 20 j 03:06	19° 16 08'31	29.34479 AU
opposition	-1003 Apr 01 j 13:27	1° 16 48'15	2°05'46	direct	-995 Jul 09 j 16:07	17° 16 45'26	
min. Earth dist.	-1003 Apr 02 j 09:03	1° 16 46'55	29.34479 AU	conjunction	-995 Oct 22 j 12:25	20° 16 14'50	1°56'22
direct	-1003 Jun 21 j 21:12	0° 16 23'44		minimum elong	-995 Oct 22 j 12:25	20° 16 14'50	1°56'22
conjunction	-1003 Oct 05 j 10:31	2° 16 53'42	1°58'00	max. Earth dist.	-995 Oct 21 j 22:40	20° 16 13'33	31.34227 AU
minimum elong	-1003 Oct 05 j 10:31	2° 16 53'42	1°58'01	retrograde	-994 Feb 02 j 02:26	22° 16 42'08	
max. Earth dist.	-1003 Oct 04 j 15:22	2° 16 51'54	31.34257 AU	opposition	-994 Apr 22 j 02:33	21° 16 20'05	2°03'48
retrograde	-1002 Jan 15 j 13:03	5° 16 20'11		min. Earth dist.	-994 Apr 22 j 16:12	21° 16 19'09	29.34210 AU
opposition	-1002 Apr 04 j 01:19	3° 16 58'14	2°06'16	direct	-994 Jul 12 j 03:17	19° 16 56'11	
min. Earth dist.	-1002 Apr 04 j 19:16	3° 16 57'01	29.34332 AU	conjunction	-994 Oct 24 j 21:44	22° 16 25'30	1°55'24
direct	-1002 Jun 24 j 10:19	2° 16 33'44		minimum elong	-994 Oct 24 j 21:44	22° 16 25'30	1°55'24
conjunction	-1002 Oct 07 j 19:49	5° 16 03'35	1°58'24	max. Earth dist.	-994 Oct 24 j 08:41	22° 16 24'16	31.33886 AU
minimum elong	-1002 Oct 07 j 19:49	5° 16 03'35	1°58'23	retrograde	-993 Feb 04 j 12:23	24° 16 52'53	
max. Earth dist.	-1002 Oct 07 j 00:58	5° 16 01'49	31.34143 AU	opposition	-993 Apr 24 j 14:48	23° 16 30'47	2°02'42
retrograde	-1001 Jan 17 j 23:02	7° 16 30'06		min. Earth dist.	-993 Apr 25 j 03:10	23° 16 29'57	29.33779 AU
opposition	-1001 Apr 06 j 13:07	6° 16 08'07	2°06'36	direct	-993 Jul 14 j 16:15	22° 16 06'55	
min. Earth dist.	-1001 Apr 07 j 06:50	6° 16 06'55	29.34275 AU	conjunction	-993 Oct 27 j 06:57	24° 16 36'09	1°54'17
direct	-1001 Jun 26 j 21:18	4° 16 43'39		minimum elong	-993 Oct 27 j 06:58	24° 16 36'09	1°54'17
max. Earth dist.	-1001 Oct 09 j 11:58	7° 16 11'48	31.34132 AU	max. Earth dist.	-993 Oct 26 j 17:42	24° 16 34'54	31.33386 AU
conjunction	-1001 Oct 10 j 05:10	7° 16 13'25	1°58'37	retrograde	-992 Feb 06 j 23:28	27° 16 03'38	
minimum elong	-1001 Oct 10 j 05:10	7° 16 13'25	1°58'37	opposition	-992 Apr 26 j 03:22	25° 16 41'28	2°01'25
retrograde	-1000 Jan 20 j 08:01	9° 16 40'01		min. Earth dist.	-992 Apr 26 j 15:45	25° 16 40'38	29.33220 AU
opposition	-1000 Apr 08 j 01:04	8° 16 18'00	2°06'45	direct	-992 Jul 16 j 04:04	24° 16 17'37	
min. Earth dist.	-1000 Apr 08 j 17:44	8° 16 16'52	29.34296 AU	conjunction	-992 Oct 28 j 16:05	26° 16 46'44	1°53'00
direct	-1000 Jun 28 j 09:48	6° 16 53'36		minimum elong	-992 Oct 28 j 16:05	26° 16 46'44	1°52'59
conjunction	-1000 Oct 11 j 14:17	9° 16 23'17	1°58'40	max. Earth dist.	-992 Oct 28 j 04:27	26° 16 45'39	31.32779 AU
minimum elong	-1000 Oct 11 j 14:17	9° 16 23'17	1°58'39	retrograde	-991 Feb 08 j 08:56	29° 16 14'18	
max. Earth dist.	-1000 Oct 10 j 20:59	9° 16 21'40	31.34197 AU	opposition	-991 Apr 28 j 15:56	27° 16 52'03	1°59'58
retrograde	-999 Jan 21 j 18:57	11° 16 49'59		min. Earth dist.	-991 Apr 29 j 03:23	27° 16 51'17	29.32564 AU
opposition	-999 Apr 10 j 13:06	10° 16 27'58	2°06'42	direct	-991 Jul 18 j 17:37	26° 16 28'13	
min. Earth dist.	-999 Apr 11 j 04:48	10° 16 26'54	29.34396 AU	conjunction	-991 Oct 31 j 01:02	28° 16 57'13	1°51'34
direct	-999 Jun 30 j 19:50	9° 16 03'40		minimum elong	-991 Oct 31 j 01:03	28° 16 57'13	1°51'34
conjunction	-999 Oct 13 j 23:36	11° 16 33'17	1°58'33	max. Earth dist.	-991 Oct 30 j 13:17	28° 16 56'07	31.32114 AU
minimum elong	-999 Oct 13 j 23:36	11° 16 33'17	1°58'34		-991 Nov 28 j 15:54	0° 16	
max. Earth dist.	-999 Oct 13 j 08:10	11° 16 31'50	31.34314 AU	retrograde	-990 Feb 10 j 19:41	1° 16 24'53	
retrograde	-998 Jan 24 j 04:02	14° 16 00'06		opposition	-990 May 01 j 04:25	0° 16 02'32	1°58'20
opposition	-998 Apr 13 j 01:15	12° 16 38'05	2°06'29	min. Earth dist.	-990 May 01 j 14:49	0° 16 01'50	29.31906 AU
min. Earth dist.	-998 Apr 13 j 16:43	12° 16 37'02	29.34513 AU		-990 May 02 j 18:04	30° 16 R 17	
direct	-998 Jul 03 j 07:05	11° 16 13'52		direct	-990 Jul 21 j 04:11	28° 16 38'43	
conjunction	-998 Oct 16 j 08:39	13° 16 43'26	1°58'15		-990 Oct 02 j 09:17	0° 16	
minimum elong	-998 Oct 16 j 08:39	13° 16 43'26	1°58'15	conjunction	-990 Nov 02 j 10:04	1° 16 07'36	1°49'58
max. Earth dist.	-998 Oct 15 j 16:54	13° 16 41'57	31.34431 AU	minimum elong	-990 Nov 02 j 10:04	1° 16 07'36	1°49'56
				max. Earth dist.	-990 Nov 02 j 00:20	1° 16 06'41	31.31465 AU

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Attention, astronomical year style is used: The year -989 in astronomical counting style is the year 990 BCE in historical counting style.

retrograde	-989 Feb 13 j 03:58	3°M35'22		retrograde	-981 Mar 03 j 00:12	21°M01'37	
opposition	-989 May 03 j 16:58	2°M12'57	1°56'33	opposition	-981 May 21 j 22:50	19°M38'50	1°36'23
min. Earth dist.	-989 May 04 j 02:48	2°M12'17	29.31275 AU	min. Earth dist.	-981 May 22 j 01:32	19°M38'39	29.26878 AU
direct	-989 Jul 23 j 16:06	0°M49'09		direct	-981 Aug 10 j 09:50	18°M15'29	
conjunction	-989 Nov 04 j 18:55	3°M17'56	1°48'12	conjunction	-981 Nov 21 j 19:33	20°M43'45	1°28'44
minimum elong	-989 Nov 04 j 18:56	3°M17'56	1°48'12	minimum elong	-981 Nov 21 j 19:34	20°M43'45	1°28'44
max. Earth dist.	-989 Nov 04 j 09:17	3°M17'02	31.30880 AU	max. Earth dist.	-981 Nov 21 j 17:14	20°M43'32	31.26326 AU
retrograde	-988 Feb 15 j 15:31	5°M45'49		retrograde	-980 Mar 04 j 09:20	23°M12'48	
opposition	-988 May 05 j 05:24	4°M23'20	1°54'35	opposition	-980 May 23 j 11:49	21°M49'56	1°33'11
min. Earth dist.	-988 May 05 j 13:19	4°M22'48	29.30728 AU	min. Earth dist.	-980 May 23 j 14:19	21°M49'46	29.25892 AU
direct	-988 Jul 25 j 01:57	2°M59'34		direct	-980 Aug 11 j 22:25	20°M26'36	
conjunction	-988 Nov 06 j 03:57	5°M28'17	1°46'17	conjunction	-980 Nov 23 j 04:43	22°M54'47	1°25'42
minimum elong	-988 Nov 06 j 03:57	5°M28'17	1°46'16	minimum elong	-980 Nov 23 j 04:43	22°M54'47	1°25'41
max. Earth dist.	-988 Nov 05 j 20:01	5°M27'32	31.30373 AU	max. Earth dist.	-980 Nov 23 j 02:14	22°M54'33	31.25299 AU
retrograde	-987 Feb 17 j 01:42	7°M56'18		retrograde	-979 Mar 06 j 21:28	25°M23'57	
opposition	-987 May 07 j 18:08	6°M33'46	1°52'28	opposition	-979 May 26 j 00:44	24°M00'59	1°29'52
min. Earth dist.	-987 May 08 j 01:57	6°M33'15	29.30255 AU	min. Earth dist.	-979 May 26 j 01:39	24°M00'56	29.24812 AU
direct	-987 Jul 27 j 12:44	5°M10'05		direct	-979 Aug 14 j 09:05	22°M37'39	
conjunction	-987 Nov 08 j 12:47	7°M38'42	1°44'13	conjunction	-979 Nov 25 j 13:49	25°M05'44	1°22'31
minimum elong	-987 Nov 08 j 12:48	7°M38'42	1°44'13	minimum elong	-979 Nov 25 j 13:50	25°M05'44	1°22'31
max. Earth dist.	-987 Nov 08 j 05:38	7°M38'02	31.29944 AU	max. Earth dist.	-979 Nov 25 j 12:45	25°M05'38	31.24186 AU
retrograde	-986 Feb 19 j 14:02	10°M06'52		retrograde	-978 Mar 09 j 07:33	27°M35'03	
opposition	-986 May 10 j 06:43	8°M44'18	1°50'10	opposition	-978 May 28 j 13:44	26°M11'59	1°26'25
min. Earth dist.	-986 May 10 j 12:33	8°M43'55	29.29832 AU	min. Earth dist.	-978 May 28 j 14:45	26°M11'55	29.23682 AU
direct	-986 Jul 30 j 00:06	7°M20'40		direct	-978 Aug 16 j 20:16	24°M48'38	
conjunction	-986 Nov 10 j 21:48	9°M49'15	1°42'00	conjunction	-978 Nov 27 j 22:56	27°M16'38	1°19'14
minimum elong	-986 Nov 10 j 21:49	9°M49'15	1°41'59	minimum elong	-978 Nov 27 j 22:57	27°M16'38	1°19'13
max. Earth dist.	-986 Nov 10 j 15:31	9°M48'40	31.29527 AU	max. Earth dist.	-978 Nov 27 j 22:45	27°M16'37	31.23071 AU
retrograde	-985 Feb 22 j 02:03	12°M17'34		retrograde	-977 Mar 11 j 19:34	29°M46'05	
opposition	-985 May 12 j 19:20	10°M54'58	1°47'43	opposition	-977 May 31 j 02:25	28°M22'54	1°22'51
min. Earth dist.	-985 May 13 j 01:23	10°M54'34	29.29413 AU	min. Earth dist.	-977 May 31 j 01:22	28°M22'59	29.22580 AU
direct	-985 Aug 01 j 09:49	9°M31'25		direct	-977 Aug 19 j 07:27	26°M59'34	
conjunction	-985 Nov 13 j 06:55	11°M59'56	1°39'38	conjunction	-977 Nov 30 j 08:03	29°M27'31	1°15'51
minimum elong	-985 Nov 13 j 06:55	11°M59'56	1°39'38	minimum elong	-977 Nov 30 j 08:03	29°M27'31	1°15'50
max. Earth dist.	-985 Nov 13 j 01:51	11°M59'27	31.29099 AU	max. Earth dist.	-977 Nov 30 j 08:45	29°M27'35	31.22001 AU
retrograde	-984 Feb 24 j 13:09	14°M28'24			-977 Dec 14 j 17:40	0°♂	
opposition	-984 May 14 j 08:06	13°M05'46	1°45'06	retrograde	-976 Mar 13 j 07:40	1°♂57'07	
min. Earth dist.	-984 May 14 j 12:30	13°M05'28	29.28942 AU	opposition	-976 Jun 01 j 15:26	0°♂33'51	1°19'10
direct	-984 Aug 02 j 22:35	11°M42'17		min. Earth dist.	-976 Jun 01 j 14:13	0°♂33'56	29.21560 AU
conjunction	-984 Nov 14 j 15:52	14°M10'45	1°37'07		-976 Jun 23 j 03:10	30°♂♂	
minimum elong	-984 Nov 14 j 15:52	14°M10'45	1°37'06	direct	-976 Aug 20 j 16:45	29°M10'32	
max. Earth dist.	-984 Nov 14 j 10:47	14°M10'16	31.28592 AU		-976 Oct 15 j 06:51	0°♂	
	-984 Dec 06 j 18:23	15°M		conjunction	-976 Dec 01 j 17:07	1°♂38'25	1°12'20
retrograde	-983 Feb 26 j 01:49	16°M39'23		minimum elong	-976 Dec 01 j 17:07	1°♂38'26	1°12'19
opposition	-983 May 16 j 21:05	15°M16'42	1°42'20	max. Earth dist.	-976 Dec 01 j 19:34	1°♂38'39	31.21040 AU
min. Earth dist.	-983 May 17 j 01:19	15°M16'25	29.28390 AU	retrograde	-975 Mar 15 j 19:11	4°♂08'11	
	-983 May 27 j 06:44	15°♂M		opposition	-975 Jun 04 j 04:21	2°♂44'52	1°15'21
direct	-983 Aug 05 j 09:57	13°M53'17		min. Earth dist.	-975 Jun 04 j 01:00	2°♂45'05	29.20638 AU
	-983 Oct 09 j 21:14	15°M		direct	-975 Aug 23 j 05:18	1°♂21'36	
conjunction	-983 Nov 17 j 01:08	16°M21'41	1°34'27	conjunction	-975 Dec 04 j 02:14	3°♂49'27	1°08'43
minimum elong	-983 Nov 17 j 01:09	16°M21'42	1°34'27	minimum elong	-975 Dec 04 j 02:15	3°♂49'27	1°08'43
max. Earth dist.	-983 Nov 16 j 21:42	16°M21'22	31.27983 AU	max. Earth dist.	-975 Dec 04 j 04:56	3°♂49'42	31.20173 AU
retrograde	-982 Feb 28 j 12:27	18°M50'27		retrograde	-974 Mar 18 j 08:53	6°♂19'23	
opposition	-982 May 19 j 09:55	17°M27'44	1°39'26	opposition	-974 Jun 06 j 17:13	4°♂56'01	1°11'26
min. Earth dist.	-982 May 19 j 13:21	17°M27'30	29.27705 AU	min. Earth dist.	-974 Jun 06 j 13:21	4°♂56'16	29.19820 AU
direct	-982 Aug 07 j 23:09	16°M04'21		direct	-974 Aug 25 j 16:02	3°♂32'48	
conjunction	-982 Nov 19 j 10:17	18°M32'42	1°31'40	conjunction	-974 Dec 06 j 11:32	6°♂00'38	1°05'00
minimum elong	-982 Nov 19 j 10:18	18°M32'42	1°31'39	minimum elong	-974 Dec 06 j 11:32	6°♂00'38	1°04'59
max. Earth dist.	-982 Nov 19 j 06:23	18°M32'20	31.27233 AU	max. Earth dist.	-974 Dec 06 j 16:18	6°♂01'05	31.19392 AU

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Attention, astronomical year style is used: The year -973 in astronomical counting style is the year 974 BCE in historical counting style.

retrograde	-973 Mar 20 j 20:21	8° 2 30'45		direct	-965 Sep 14 j 21:31	23° 2 19'41	
opposition	-973 Jun 09 j 06:08	7° 2 07'21	1°07'24				
min. Earth dist.	-973 Jun 09 j 01:03	7° 2 07'41	29.19051 AU	conjunction	-965 Dec 26 j 01:55	25° 2 47'11	0°27'50
direct	-973 Aug 28 j 04:42	5° 2 44'11		minimum elong	-965 Dec 26 j 01:55	25° 2 47'11	0°27'49
				max. Earth dist.	-965 Dec 26 j 13:40	25° 2 48'17	31.10442 AU
conjunction	-973 Dec 08 j 20:39	8° 2 12'01	1°01'11	retrograde	-964 Apr 09 j 08:13	28° 2 18'41	
minimum elong	-973 Dec 08 j 20:39	8° 2 12'01	1°01'10	opposition	-964 Jun 29 j 03:47	26° 2 54'37	0°27'21
max. Earth dist.	-973 Dec 09 j 01:25	8° 2 12'28	31.18649 AU	min. Earth dist.	-964 Jun 28 j 15:50	26° 2 55'26	29.09880 AU
retrograde	-972 Mar 22 j 08:50	10° 2 42'19		direct	-964 Sep 16 j 10:01	25° 2 31'34	
opposition	-972 Jun 10 j 19:10	9° 2 18'53	1°03'16				
min. Earth dist.	-972 Jun 10 j 13:02	9° 2 19'17	29.18315 AU	conjunction	-964 Dec 27 j 11:39	27° 2 59'02	0°23'25
direct	-972 Aug 29 j 15:00	7° 2 55'47		minimum elong	-964 Dec 27 j 11:39	27° 2 59'02	0°23'24
				max. Earth dist.	-964 Dec 27 j 23:27	28° 2 00'08	31.09325 AU
conjunction	-972 Dec 10 j 06:07	10° 2 23'36	0°57'16		-963 Feb 27 j 02:31	0° 2	
minimum elong	-972 Dec 10 j 06:07	10° 2 23'36	0°57'15	retrograde	-963 Apr 11 j 21:41	0° 2 30'41	
max. Earth dist.	-972 Dec 10 j 12:43	10° 2 24'13	31.17904 AU		-963 May 27 j 04:11	30° R 2	
retrograde	-971 Mar 24 j 19:07	12° 2 54'05		opposition	-963 Jul 01 j 16:45	29° 2 06'32	0°22'36
opposition	-971 Jun 13 j 08:17	11° 2 30'37	0°59'02	min. Earth dist.	-963 Jul 01 j 03:42	29° 2 07'25	29.08826 AU
min. Earth dist.	-971 Jun 13 j 01:49	11° 2 31'03	29.17549 AU	direct	-963 Sep 18 j 20:32	27° 2 43'30	
direct	-971 Sep 01 j 03:45	10° 2 07'36			-963 Dec 25 j 02:14	0° 2	
conjunction	-971 Dec 12 j 15:32	12° 2 35'22	0°53'16	conjunction	-963 Dec 29 j 21:36	0° 2 10'57	0°18'58
minimum elong	-971 Dec 12 j 15:32	12° 2 35'22	0°53'15	minimum elong	-963 Dec 29 j 21:36	0° 2 10'57	0°18'57
max. Earth dist.	-971 Dec 12 j 22:08	12° 2 36'00	31.17122 AU	max. Earth dist.	-963 Dec 30 j 11:18	0° 2 12'14	31.08319 AU
retrograde	-970 Mar 27 j 08:37	15° 2 06'02		retrograde	-962 Apr 14 j 09:07	2° 2 42'45	
opposition	-970 Jun 15 j 21:20	13° 2 42'32	0°54'43	opposition	-962 Jul 04 j 05:45	1° 2 18'33	0°17'49
min. Earth dist.	-970 Jun 15 j 13:23	13° 2 43'04	29.16721 AU	min. Earth dist.	-962 Jul 03 j 16:09	1° 2 19'28	29.07870 AU
direct	-970 Sep 03 j 14:42	12° 2 19'33			-962 Sep 04 j 23:15	30° R 2	
conjunction	-970 Dec 15 j 01:14	14° 2 47'18	0°49'11	direct	-962 Sep 21 j 09:16	29° 2 55'33	
minimum elong	-970 Dec 15 j 01:14	14° 2 47'18	0°49'09		-962 Oct 07 j 12:14	0° 2	
max. Earth dist.	-970 Dec 15 j 08:47	14° 2 48'01	31.16233 AU	conjunction	-961 Jan 01 j 07:32	2° 2 23'00	0°14'29
retrograde	-969 Mar 29 j 18:40	17° 2 18'09		minimum elong	-961 Jan 01 j 07:32	2° 2 23'00	0°14'28
opposition	-969 Jun 18 j 10:26	15° 2 54'34	0°50'19	behind sun begin	-961 Jan 01 j 04:31	2° 2 22'43	
min. Earth dist.	-969 Jun 18 j 02:54	15° 2 55'05	29.15774 AU	behind sun end	-961 Jan 01 j 10:32	2° 2 23'16	
direct	-969 Sep 06 j 01:45	14° 2 31'37		max. Earth dist.	-961 Jan 01 j 21:29	2° 2 24'18	31.07422 AU
conjunction	-969 Dec 17 j 10:59	16° 2 59'19	0°45'02	retrograde	-961 Apr 16 j 23:03	4° 2 54'59	
minimum elong	-969 Dec 17 j 10:59	16° 2 59'19	0°45'01	opposition	-961 Jul 06 j 18:35	3° 2 30'44	0°13'00
max. Earth dist.	-969 Dec 17 j 19:07	17° 2 00'06	31.15236 AU	min. Earth dist.	-961 Jul 06 j 03:19	3° 2 31'46	29.07016 AU
retrograde	-968 Mar 31 j 06:48	19° 2 30'19		direct	-961 Sep 23 j 20:13	2° 2 07'46	
opposition	-968 Jun 19 j 23:34	18° 2 06'40	0°45'50	conjunction	-960 Jan 03 j 17:37	4° 2 35'14	0°09'58
min. Earth dist.	-968 Jun 19 j 14:24	18° 2 07'18	29.14706 AU	minimum elong	-960 Jan 03 j 17:37	4° 2 35'14	0°09'58
direct	-968 Sep 07 j 12:52	16° 2 43'43		behind sun begin	-960 Jan 03 j 12:24	4° 2 34'46	
conjunction	-968 Dec 18 j 20:37	19° 2 11'23	0°40'49	behind sun end	-960 Jan 03 j 22:51	4° 2 35'43	
minimum elong	-968 Dec 18 j 20:38	19° 2 11'23	0°40'48	max. Earth dist.	-960 Jan 04 j 08:47	4° 2 36'40	31.06599 AU
max. Earth dist.	-968 Dec 19 j 05:03	19° 2 12'10	31.14108 AU	retrograde	-960 Apr 18 j 09:50	7° 2 07'25	
retrograde	-967 Apr 02 j 18:57	21° 2 42'31		opposition	-960 Jul 08 j 07:44	5° 2 43'09	0°08'09
opposition	-967 Jun 22 j 12:51	20° 2 18'46	0°41'18	min. Earth dist.	-960 Jul 07 j 16:35	5° 2 44'11	29.06224 AU
min. Earth dist.	-967 Jun 22 j 04:04	20° 2 19'22	29.13528 AU	direct	-960 Sep 25 j 07:02	4° 2 20'15	
direct	-967 Sep 09 j 22:17	18° 2 55'48		conjunction	-959 Jan 05 j 03:48	6° 2 47'44	0°05'27
conjunction	-967 Dec 21 j 06:29	21° 2 23'23	0°36'32	minimum elong	-959 Jan 05 j 03:47	6° 2 47'44	0°05'26
minimum elong	-967 Dec 21 j 06:29	21° 2 23'23	0°36'32	behind sun begin	-959 Jan 04 j 21:35	6° 2 47'10	
max. Earth dist.	-967 Dec 21 j 16:17	21° 2 24'18	31.12898 AU	behind sun end	-959 Jan 05 j 09:58	6° 2 48'17	
retrograde	-966 Apr 05 j 06:58	23° 2 54'39		max. Earth dist.	-959 Jan 05 j 19:53	6° 2 49'15	31.05834 AU
opposition	-966 Jun 25 j 01:43	22° 2 30'47	0°36'42	retrograde	-959 Apr 20 j 22:38	9° 2 20'06	
min. Earth dist.	-966 Jun 24 j 15:21	22° 2 31'29	29.12285 AU	opposition	-959 Jul 10 j 20:45	7° 2 55'49	0°03'17
direct	-966 Sep 12 j 11:07	21° 2 07'47		min. Earth dist.	-959 Jul 10 j 03:56	7° 2 56'58	29.05458 AU
conjunction	-966 Dec 23 j 16:09	23° 2 35'19	0°32'13	direct	-959 Sep 27 j 17:54	6° 2 32'57	
minimum elong	-966 Dec 23 j 16:09	23° 2 35'19	0°32'11	conjunction	-958 Jan 07 j 14:09	9° 2 00'29	0°00'52
max. Earth dist.	-966 Dec 24 j 01:49	23° 2 36'13	31.11651 AU	minimum elong	-958 Jan 07 j 14:09	9° 2 00'29	0°00'52
retrograde	-965 Apr 07 j 20:47	26° 2 06'42		behind sun begin	-958 Jan 07 j 07:45	8° 2 59'54	
opposition	-965 Jun 27 j 14:47	24° 2 42'43	0°32'03	behind sun end	-958 Jan 07 j 20:34	9° 2 01'04	
min. Earth dist.	-965 Jun 27 j 04:08	24° 2 43'26	29.11054 AU	max. Earth dist.	-958 Jan 08 j 06:27	9° 2 02'01	31.05052 AU
				desc. node	-958 Mar 15 j 19:33	11° 2 08'57	

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Attention, astronomical year style is used: The year -958 in astronomical counting style is the year 959 BCE in historical counting style.

retrograde	-958 Apr 23 j 11:21	11° $\overline{33}$ '03		conjunction	-950 Jan 25 j 04:42	26° $\overline{34}$ '51	0°-35'-8
opposition	-958 Jul 13 j 09:45	10° $\overline{30}$ '45	0°-1'-34	minimum elong	-950 Jan 25 j 04:41	26° $\overline{34}$ '50	0°35'09
min. Earth dist.	-958 Jul 12 j 17:33	10° $\overline{30}$ '51	29.04664 AU	max. Earth dist.	-950 Jan 26 j 01:29	26° $\overline{34}$ '49	30.96367 AU
direct	-958 Sep 30 j 02:40	8° $\overline{34}$ '56		retrograde	-950 May 11 j 20:49	29° $\overline{32}$ '26	
				opposition	-950 Jul 31 j 17:19	27° $\overline{35}$ '33	0°-39'-55
conjunction	-957 Jan 10 j 00:48	11° $\overline{31}$ '29	0°-3'-47	min. Earth dist.	-950 Jul 30 j 20:19	27° $\overline{35}$ '00	28.95909 AU
minimum elong	-957 Jan 10 j 00:47	11° $\overline{31}$ '29	0°03'49	direct	-950 Oct 18 j 00:31	26° $\overline{32}$ '35	
behind sun begin	-957 Jan 09 j 18:26	11° $\overline{31}$ '25					
behind sun end	-957 Jan 10 j 07:08	11° $\overline{31}$ '04		conjunction	-949 Jan 27 j 15:46	29° $\overline{30}$ '13	0°-39'-28
max. Earth dist.	-957 Jan 10 j 18:15	11° $\overline{31}$ '08	31.04224 AU	minimum elong	-949 Jan 27 j 15:46	29° $\overline{30}$ '13	0°39'30
retrograde	-957 Apr 26 j 00:16	13° $\overline{34}$ '14		max. Earth dist.	-949 Jan 28 j 12:45	29° $\overline{30}$ '12	30.95410 AU
opposition	-957 Jul 15 j 22:47	12° $\overline{32}$ '54	0°-6'-27		-949 Feb 23 j 15:30	0° \approx	
min. Earth dist.	-957 Jul 15 j 05:17	12° $\overline{32}$ '06	29.03784 AU	retrograde	-949 May 14 j 09:12	1° \approx 33'56	
direct	-957 Oct 02 j 15:03	10° $\overline{35}$ '07		min. Earth dist.	-949 Aug 02 j 09:33	0° \approx 10'25	28.95021 AU
				opposition	-949 Aug 03 j 06:09	0° \approx 09'00	0°-44'-32
conjunction	-956 Jan 12 j 11:17	13° $\overline{32}$ '42	0°-8'-19		-949 Aug 08 j 17:01	30° \overline{R} $\overline{3}$	
minimum elong	-956 Jan 12 j 11:17	13° $\overline{32}$ '42	0°08'20	direct	-949 Oct 20 j 10:07	28° $\overline{34}$ '01	
behind sun begin	-956 Jan 12 j 05:36	13° $\overline{32}$ '12			-949 Dec 27 j 06:15	0° \approx	
behind sun end	-956 Jan 12 j 16:57	13° $\overline{32}$ '13					
max. Earth dist.	-956 Jan 13 j 04:08	13° $\overline{32}$ '18	31.03287 AU	conjunction	-948 Jan 30 j 02:55	1° \approx 13'41	0°-43'-45
retrograde	-956 Apr 27 j 14:53	15° $\overline{35}$ '37		minimum elong	-948 Jan 30 j 02:54	1° \approx 13'41	0°43'46
opposition	-956 Jul 17 j 12:02	14° $\overline{35}$ '14	0°-11'-19	max. Earth dist.	-948 Jan 31 j 01:21	1° \approx 15'48	30.94576 AU
min. Earth dist.	-956 Jul 16 j 18:46	14° $\overline{35}$ '25	29.02796 AU	retrograde	-948 May 15 j 21:15	3° \approx 47'32	
direct	-956 Oct 04 j 00:54	13° $\overline{31}$ '27		opposition	-948 Aug 04 j 18:51	2° \approx 22'34	0°-49'-5
				min. Earth dist.	-948 Aug 03 j 20:47	2° \approx 24'05	28.94232 AU
conjunction	-955 Jan 13 j 22:11	15° $\overline{34}$ '04	0°-12'-51	direct	-948 Oct 21 j 22:10	0° \approx 59'36	
minimum elong	-955 Jan 13 j 22:11	15° $\overline{34}$ '04	0°12'53				
behind sun begin	-955 Jan 13 j 18:09	15° $\overline{33}$ '42		conjunction	-947 Jan 31 j 14:13	3° \approx 27'18	0°-47'-58
behind sun end	-955 Jan 14 j 02:12	15° $\overline{34}$ '26		minimum elong	-947 Jan 31 j 14:13	3° \approx 27'18	0°48'00
max. Earth dist.	-955 Jan 14 j 16:26	15° $\overline{34}$ '47	31.02233 AU	max. Earth dist.	-947 Feb 01 j 12:12	3° \approx 29'23	30.93825 AU
retrograde	-955 Apr 30 j 03:08	18° $\overline{31}$ '07		retrograde	-947 May 18 j 10:53	6° \approx 01'17	
min. Earth dist.	-955 Jul 19 j 07:11	16° $\overline{34}$ '53	29.01678 AU	min. Earth dist.	-947 Aug 06 j 09:47	4° \approx 37'48	28.93522 AU
opposition	-955 Jul 20 j 01:03	16° $\overline{34}$ '40	0°-16'-10	opposition	-947 Aug 07 j 07:34	4° \approx 36'17	0°-53'-33
direct	-955 Oct 06 j 12:56	15° $\overline{32}$ '52		direct	-947 Oct 24 j 07:09	3° \approx 13'20	
conjunction	-954 Jan 16 j 08:57	17° $\overline{35}$ '29	0°-17'-22	conjunction	-946 Feb 03 j 01:51	5° \approx 41'06	0°-52'-7
minimum elong	-954 Jan 16 j 08:57	17° $\overline{35}$ '29	0°17'23	minimum elong	-946 Feb 03 j 01:51	5° \approx 41'06	0°52'09
max. Earth dist.	-954 Jan 17 j 02:34	17° $\overline{35}$ '08	31.01070 AU	max. Earth dist.	-946 Feb 04 j 01:18	5° \approx 43'19	30.93126 AU
retrograde	-954 May 02 j 17:45	20° $\overline{32}$ '39		retrograde	-946 May 20 j 23:36	8° \approx 15'13	
opposition	-954 Jul 22 j 14:05	19° $\overline{30}$ '06	0°-20'-59	opposition	-946 Aug 09 j 20:14	6° \approx 50'12	0°-57'-57
min. Earth dist.	-954 Jul 21 j 19:52	19° $\overline{30}$ '21	29.00477 AU	min. Earth dist.	-946 Aug 08 j 21:53	6° \approx 51'45	28.92825 AU
direct	-954 Oct 09 j 00:01	17° $\overline{33}$ '16		direct	-946 Oct 26 j 18:36	5° \approx 27'15	
conjunction	-953 Jan 18 j 19:49	20° $\overline{30}$ '52	0°-21'-51	conjunction	-945 Feb 05 j 13:25	7° \approx 55'06	0°-56'-12
minimum elong	-953 Jan 18 j 19:49	20° $\overline{30}$ '52	0°21'54	minimum elong	-945 Feb 05 j 13:24	7° \approx 55'06	0°56'14
max. Earth dist.	-953 Jan 19 j 14:48	20° $\overline{30}$ '40	30.99830 AU	max. Earth dist.	-945 Feb 06 j 12:07	7° \approx 57'15	30.92420 AU
retrograde	-953 May 05 j 06:23	22° $\overline{34}$ '08		retrograde	-945 May 23 j 14:40	10° \approx 29'20	
min. Earth dist.	-953 Jul 24 j 08:42	21° $\overline{31}$ '64	28.99229 AU	min. Earth dist.	-945 Aug 11 j 10:35	9° \approx 05'51	28.92109 AU
opposition	-953 Jul 25 j 02:59	21° $\overline{31}$ '53	0°-25'-47	opposition	-945 Aug 12 j 08:59	9° \approx 04'18	-1°-2'-16
direct	-953 Oct 11 j 13:31	19° $\overline{35}$ '37		direct	-945 Oct 29 j 05:14	7° \approx 41'21	
conjunction	-952 Jan 21 j 06:41	22° $\overline{32}$ '13	0°-26'-19	conjunction	-944 Feb 08 j 01:21	10° \approx 09'16	-1°00'-11
minimum elong	-952 Jan 21 j 06:40	22° $\overline{32}$ '13	0°26'21	minimum elong	-944 Feb 08 j 01:21	10° \approx 09'16	1°00'13
max. Earth dist.	-952 Jan 22 j 01:40	22° $\overline{32}$ '01	30.98602 AU	max. Earth dist.	-944 Feb 09 j 01:01	10° \approx 11'30	30.91659 AU
retrograde	-952 May 06 j 20:37	24° $\overline{35}$ '35		retrograde	-944 May 25 j 04:06	12° \approx 43'37	
opposition	-952 Jul 26 j 15:52	23° $\overline{32}$ '51	0°-30'-33	opposition	-944 Aug 13 j 21:45	11° \approx 18'34	-1°-6'-29
min. Earth dist.	-952 Jul 25 j 20:12	23° $\overline{32}$ '12	28.98033 AU	min. Earth dist.	-944 Aug 12 j 23:43	11° \approx 20'05	28.91311 AU
direct	-952 Oct 13 j 01:07	22° $\overline{30}$ '56		direct	-944 Oct 30 j 17:51	9° \approx 55'36	
conjunction	-951 Jan 22 j 17:34	24° $\overline{33}$ '32	0°-30'-45	conjunction	-943 Feb 09 j 13:20	12° \approx 23'34	-1°-4'-6
minimum elong	-951 Jan 22 j 17:34	24° $\overline{33}$ '32	0°30'47	minimum elong	-943 Feb 09 j 13:20	12° \approx 23'34	1°04'07
max. Earth dist.	-951 Jan 23 j 13:32	24° $\overline{33}$ '25	30.97429 AU	max. Earth dist.	-943 Feb 10 j 12:19	12° \approx 25'45	30.90816 AU
retrograde	-951 May 09 j 07:35	27° $\overline{30}$ '01		retrograde	-943 May 27 j 19:01	14° \approx 58'01	
min. Earth dist.	-951 Jul 28 j 09:22	25° $\overline{34}$ '32	28.96914 AU	min. Earth dist.	-943 Aug 15 j 11:49	13° \approx 34'29	28.90418 AU
opposition	-951 Jul 29 j 04:46	25° $\overline{34}$ '12	0°-35'-15	opposition	-943 Aug 16 j 10:28	13° \approx 32'55	-1°-10'-37
direct	-951 Oct 15 j 12:45	24° $\overline{31}$ '14		direct	-943 Nov 02 j 05:29	12° \approx 09'55	

Planetary Phenomena of Neptune from -1400 through -900 (UT), Astrodienst AG 7-Dez-2017 14:45, page 30

Attention, astronomical year style is used: The year -942 in astronomical counting style is the year 943 BCE in historical counting style.

conjunction	-942 Feb 12 j 01:30	14° \approx 37'56	-1°-7'-54	min. Earth dist.	-935 Sep 02 j 14:10	1° \times 29'36	28.84077 AU
minimum elong	-942 Feb 12 j 01:30	14° \approx 37'56	1°07'55	direct	-935 Nov 19 j 23:36	0° \times 04'42	
max. Earth dist.	-942 Feb 13 j 00:38	14° \approx 40'07	30.89857 AU				
	-942 Feb 21 j 19:23	15° \approx		conjunction	-934 Mar 02 j 04:13	2° \times 33'11	-1°-34'-14
retrograde	-942 May 30 j 07:30	17° \approx 12'27		minimum elong	-934 Mar 02 j 04:13	2° \times 33'11	1°34'15
opposition	-942 Aug 18 j 23:03	15° \approx 47'17	-1°-14'-38	max. Earth dist.	-934 Mar 03 j 04:55	2° \times 35'31	30.83815 AU
min. Earth dist.	-942 Aug 18 j 01:22	15° \approx 48'48	28.89421 AU	retrograde	-934 Jun 17 j 17:31	5° \times 08'12	
	-942 Sep 18 j 02:59	15° \times		min. Earth dist.	-934 Sep 05 j 01:36	3° \times 44'27	28.83782 AU
direct	-942 Nov 04 j 17:31	14° \approx 24'15		opposition	-934 Sep 06 j 01:17	3° \times 42'47	-1°-42'-16
	-942 Dec 20 j 15:53	15° \approx		direct	-934 Nov 22 j 10:18	2° \times 19'30	
conjunction	-941 Feb 14 j 13:40	16° \approx 52'18	-1°-11'-36	conjunction	-933 Mar 04 j 17:04	4° \times 48'06	-1°-36'-56
minimum elong	-941 Feb 14 j 13:39	16° \approx 52'18	1°11'38	minimum elong	-933 Mar 04 j 17:04	4° \times 48'06	1°36'58
max. Earth dist.	-941 Feb 15 j 13:00	16° \approx 54'30	30.88839 AU	max. Earth dist.	-933 Mar 05 j 18:02	4° \times 50'27	30.83533 AU
retrograde	-941 Jun 01 j 22:01	19° \approx 26'52		retrograde	-933 Jun 20 j 07:13	7° \times 23'11	
opposition	-941 Aug 21 j 11:32	18° \approx 01'38	-1°-18'-32	opposition	-933 Sep 08 j 13:30	5° \times 57'47	-1°-45'-4
min. Earth dist.	-941 Aug 20 j 12:49	18° \approx 03'13	28.88389 AU	min. Earth dist.	-933 Sep 07 j 14:50	5° \times 59'22	28.83520 AU
direct	-941 Nov 07 j 06:06	16° \approx 38'32		direct	-933 Nov 24 j 22:25	4° \times 34'30	
conjunction	-940 Feb 17 j 01:38	19° \approx 06'37	-1°-15'-12	conjunction	-932 Mar 06 j 06:04	7° \times 03'12	-1°-39'-30
minimum elong	-940 Feb 17 j 01:38	19° \approx 06'37	1°15'13	minimum elong	-932 Mar 06 j 06:03	7° \times 03'12	1°39'30
max. Earth dist.	-940 Feb 18 j 00:46	19° \approx 08'48	30.87800 AU	max. Earth dist.	-932 Mar 07 j 06:53	7° \times 05'32	30.83272 AU
retrograde	-940 Jun 03 j 10:17	21° \approx 41'15		retrograde	-932 Jun 21 j 22:57	9° \times 38'19	
min. Earth dist.	-940 Aug 22 j 02:18	20° \approx 17'28	28.87380 AU	min. Earth dist.	-932 Sep 09 j 02:20	8° \times 14'34	28.83240 AU
opposition	-940 Aug 23 j 00:07	20° \approx 15'57	-1°-22'-19	opposition	-932 Sep 10 j 01:35	8° \times 12'56	-1°-47'-43
direct	-940 Nov 08 j 16:34	18° \approx 52'47		direct	-932 Nov 26 j 11:29	6° \times 49'38	
conjunction	-939 Feb 18 j 13:58	21° \approx 20'54	-1°-18'-41	conjunction	-931 Mar 08 j 19:17	9° \times 18'25	-1°-41'-54
minimum elong	-939 Feb 18 j 13:58	21° \approx 20'54	1°18'43	minimum elong	-931 Mar 08 j 19:17	9° \times 18'25	1°41'55
max. Earth dist.	-939 Feb 19 j 14:08	21° \approx 23'11	30.86822 AU	max. Earth dist.	-931 Mar 09 j 19:17	9° \times 20'41	30.82948 AU
retrograde	-939 Jun 05 j 22:11	23° \approx 55'35		retrograde	-931 Jun 24 j 11:41	11° \times 53'35	
opposition	-939 Aug 25 j 12:17	22° \approx 30'14	-1°-25'-59	opposition	-931 Sep 12 j 13:41	10° \times 28'12	-1°-50'-13
min. Earth dist.	-939 Aug 24 j 13:22	22° \approx 31'50	28.86450 AU	min. Earth dist.	-931 Sep 11 j 16:00	10° \times 29'43	28.82886 AU
direct	-939 Nov 11 j 04:54	21° \approx 07'01		direct	-931 Nov 28 j 22:28	9° \times 04'52	
conjunction	-938 Feb 21 j 02:12	23° \approx 35'11	-1°-22'-3	conjunction	-930 Mar 11 j 08:46	11° \times 33'43	-1°-44'-9
minimum elong	-938 Feb 21 j 02:11	23° \approx 35'11	1°22'04	minimum elong	-930 Mar 11 j 08:45	11° \times 33'43	1°44'10
max. Earth dist.	-938 Feb 22 j 01:37	23° \approx 37'24	30.85941 AU	max. Earth dist.	-930 Mar 12 j 08:54	11° \times 36'00	30.82550 AU
retrograde	-938 Jun 08 j 11:09	26° \approx 09'56		retrograde	-930 Jun 27 j 01:01	14° \times 08'52	
min. Earth dist.	-938 Aug 27 j 02:08	24° \approx 46'06	28.85648 AU	min. Earth dist.	-930 Sep 14 j 03:36	12° \times 45'01	28.82440 AU
opposition	-938 Aug 28 j 00:38	24° \approx 44'32	-1°-29'-31	opposition	-930 Sep 15 j 01:42	12° \times 43'27	-1°-52'-32
direct	-938 Nov 13 j 13:59	23° \approx 21'17		direct	-930 Dec 01 j 11:19	11° \times 20'05	
conjunction	-937 Feb 23 j 14:32	25° \approx 49'31	-1°-25'-18	conjunction	-929 Mar 13 j 21:56	13° \times 48'59	-1°-46'-14
minimum elong	-937 Feb 23 j 14:31	25° \approx 49'31	1°25'19	minimum elong	-929 Mar 13 j 21:56	13° \times 48'59	1°46'16
max. Earth dist.	-937 Feb 24 j 15:24	25° \approx 51'52	30.85197 AU	max. Earth dist.	-929 Mar 14 j 20:38	13° \times 51'07	30.82064 AU
retrograde	-937 Jun 10 j 23:26	28° \approx 24'20		retrograde	-929 Jun 29 j 14:33	16° \times 24'07	
opposition	-937 Aug 30 j 12:51	26° \approx 58'54	-1°-32'-55	opposition	-929 Sep 17 j 13:48	14° \times 58'40	-1°-54'-41
min. Earth dist.	-937 Aug 29 j 13:37	27° \approx 00'31	28.84978 AU	min. Earth dist.	-929 Sep 16 j 16:47	15° \times 00'08	28.81937 AU
direct	-937 Nov 16 j 01:19	25° \approx 35'37		direct	-929 Dec 03 j 21:36	13° \times 35'13	
conjunction	-936 Feb 26 j 02:54	28° \approx 03'55	-1°-28'-24	conjunction	-928 Mar 15 j 11:27	16° \times 04'09	-1°-48'-10
minimum elong	-936 Feb 26 j 02:53	28° \approx 03'55	1°28'26	minimum elong	-928 Mar 15 j 11:26	16° \times 04'09	1°48'12
max. Earth dist.	-936 Feb 27 j 03:04	28° \approx 06'12	30.84606 AU	max. Earth dist.	-928 Mar 16 j 10:53	16° \times 06'22	30.81547 AU
	-936 Apr 24 j 00:17	0° \times		retrograde	-928 Jul 01 j 02:13	18° \times 39'15	
retrograde	-936 Jun 12 j 13:43	0° \times 38'49		min. Earth dist.	-928 Sep 18 j 04:32	17° \times 15'15	28.81419 AU
	-936 Aug 02 j 13:46	30° \times		opposition	-928 Sep 19 j 01:36	17° \times 13'46	-1°-56'-40
min. Earth dist.	-936 Aug 31 j 01:43	29° \approx 15'00	28.84471 AU	direct	-928 Dec 05 j 09:54	15° \times 50'14	
opposition	-936 Sep 01 j 01:05	29° \approx 13'22	-1°-36'-11				
direct	-936 Nov 17 j 11:40	27° \approx 50'04		conjunction	-927 Mar 18 j 00:51	18° \times 19'13	-1°-49'-56
	-935 Feb 19 j 11:34	0° \times		minimum elong	-927 Mar 18 j 00:51	18° \times 19'13	1°49'58
conjunction	-935 Feb 27 j 15:31	0° \times 18'28	-1°-31'-23	max. Earth dist.	-927 Mar 18 j 22:57	18° \times 21'18	30.81048 AU
minimum elong	-935 Feb 27 j 15:31	0° \times 18'28	1°31'25	retrograde	-927 Jul 03 j 15:12	20° \times 54'16	
max. Earth dist.	-935 Feb 28 j 16:51	0° \times 20'52	30.84153 AU	opposition	-927 Sep 21 j 13:26	19° \times 28'45	-1°-58'-28
retrograde	-935 Jun 15 j 02:39	2° \times 53'25		min. Earth dist.	-927 Sep 20 j 16:46	19° \times 30'12	28.80956 AU
opposition	-935 Sep 03 j 13:17	1° \times 27'59	-1°-39'-18	direct	-927 Dec 07 j 20:32	18° \times 05'08	

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Attention, astronomical year style is used: The year -926 in astronomical counting style is the year 927 BCE in historical counting style.

conjunction	-926 Mar 20 j 14:23	20° H 34'11	-1°-51'-32	conjunction	-918 Apr 08 j 05:08	8° V 35'59	-1°-58'-1
minimum elong	-926 Mar 20 j 14:23	20° H 34'11	1°51'33	minimum elong	-918 Apr 08 j 05:08	8° V 35'59	1°58'02
max. Earth dist.	-926 Mar 21 j 13:17	20° H 36'20	30.80611 AU	max. Earth dist.	-918 Apr 08 j 23:24	8° V 37'42	30.81026 AU
retrograde	-926 Jul 06 j 02:47	23° H 09'11		retrograde	-918 Jul 24 j 15:43	11° V 10'47	
min. Earth dist.	-926 Sep 23 j 04:55	21° H 45'04	28.80573 AU	opposition	-918 Oct 11 j 21:23	9° V 45'35	-2°-6'-13
opposition	-926 Sep 24 j 01:04	21° H 43'39	-2°00'-5	min. Earth dist.	-918 Oct 11 j 04:47	9° V 46'46	28.81207 AU
direct	-926 Dec 10 j 08:09	20° H 19'58		direct	-918 Dec 28 j 05:07	8° V 21'48	
conjunction	-925 Mar 23 j 03:51	22° H 49'05	-1°-52'-58	conjunction	-917 Apr 10 j 19:31	10° V 51'44	-1°-58'-1
minimum elong	-925 Mar 23 j 03:51	22° H 49'05	1°52'59	minimum elong	-917 Apr 10 j 19:31	10° V 51'44	1°58'01
max. Earth dist.	-925 Mar 24 j 01:48	22° H 51'09	30.80299 AU	max. Earth dist.	-917 Apr 11 j 13:54	10° V 53'28	30.81071 AU
retrograde	-925 Jul 08 j 17:07	25° H 24'03		retrograde	-917 Jul 27 j 03:23	13° V 26'27	
opposition	-925 Sep 26 j 12:42	23° H 58'30	-2°-1'-31	opposition	-917 Oct 14 j 08:48	12° V 01'16	-2°-6'-8
min. Earth dist.	-925 Sep 25 j 16:04	23° H 59'57	28.80335 AU	min. Earth dist.	-917 Oct 13 j 17:18	12° V 02'22	28.81206 AU
direct	-925 Dec 12 j 19:01	22° H 34'47		direct	-917 Dec 30 j 16:28	10° V 37'25	
conjunction	-924 Mar 24 j 17:21	25° H 03'58	-1°-54'-13	conjunction	-916 Apr 12 j 09:44	13° V 07'25	-1°-57'-50
minimum elong	-924 Mar 24 j 17:21	25° H 03'58	1°54'14	minimum elong	-916 Apr 12 j 09:44	13° V 07'25	1°57'51
max. Earth dist.	-924 Mar 25 j 15:36	25° H 06'03	30.80120 AU	max. Earth dist.	-916 Apr 13 j 02:21	13° V 08'59	30.81050 AU
retrograde	-924 Jul 10 j 05:53	27° H 38'55		retrograde	-916 Jul 28 j 16:50	15° V 42'02	
min. Earth dist.	-924 Sep 27 j 04:43	26° H 14'46	28.80233 AU	opposition	-916 Oct 15 j 20:05	14° V 16'52	-2°-5'-50
opposition	-924 Sep 28 j 00:23	26° H 13'23	-2°-2'-46	min. Earth dist.	-916 Oct 15 j 04:50	14° V 17'56	28.81155 AU
direct	-924 Dec 14 j 07:11	24° H 49'38		direct	-915 Jan 01 j 03:34	12° V 52'55	
conjunction	-923 Mar 27 j 07:06	27° H 18'55	-1°-55'-18	conjunction	-915 Apr 15 j 00:10	15° V 22'59	-1°-57'-29
minimum elong	-923 Mar 27 j 07:06	27° H 18'55	1°55'19	minimum elong	-915 Apr 15 j 00:10	15° V 22'59	1°57'29
max. Earth dist.	-923 Mar 28 j 05:02	27° H 20'59	30.80099 AU	max. Earth dist.	-915 Apr 15 j 16:28	15° V 24'31	30.80980 AU
retrograde	-923 Jul 12 j 20:50	29° H 53'51		retrograde	-915 Jul 31 j 04:00	17° V 57'29	
opposition	-923 Sep 30 j 11:46	28° H 28'21	-2°-3'-49	opposition	-915 Oct 18 j 07:15	16° V 32'18	-2°-5'-22
min. Earth dist.	-923 Sep 29 j 15:26	28° H 29'47	28.80278 AU	min. Earth dist.	-915 Oct 17 j 17:32	16° V 33'16	28.81087 AU
direct	-923 Dec 16 j 20:04	27° H 04'35		direct	-914 Jan 03 j 16:17	15° V 08'17	
conjunction	-922 Mar 29 j 20:51	29° H 33'59	-1°-56'-12	conjunction	-914 Apr 17 j 14:29	17° V 38'24	-1°-56'-56
minimum elong	-922 Mar 29 j 20:51	29° H 33'59	1°56'14	minimum elong	-914 Apr 17 j 14:29	17° V 38'24	1°56'57
max. Earth dist.	-922 Mar 30 j 18:14	29° H 36'00	30.80201 AU	max. Earth dist.	-914 Apr 18 j 05:51	17° V 39'50	30.80940 AU
	-922 Apr 10 j 11:00	0° V		retrograde	-914 Aug 02 j 17:40	20° V 12'46	
retrograde	-922 Jul 15 j 09:49	2° V 08'54		opposition	-914 Oct 20 j 18:18	18° V 47'35	-2°-4'-41
opposition	-922 Oct 02 j 23:25	0° V 43'28	-2°-4'-41	min. Earth dist.	-914 Oct 20 j 04:14	18° V 48'35	28.81071 AU
min. Earth dist.	-922 Oct 02 j 04:27	0° V 44'48	28.80441 AU	direct	-913 Jan 06 j 05:23	17° V 23'28	
	-922 Oct 29 j 21:00	30° R H					
direct	-922 Dec 19 j 06:55	29° H 19'42		conjunction	-913 Apr 20 j 04:36	19° V 53'39	-1°-56'-14
	-921 Feb 06 j 08:42	0° V		minimum elong	-913 Apr 20 j 04:36	19° V 53'39	1°56'14
				max. Earth dist.	-913 Apr 20 j 19:17	19° V 55'01	30.80959 AU
conjunction	-921 Apr 01 j 10:38	1° V 49'13	-1°-56'-56	retrograde	-913 Aug 05 j 05:53	22° V 27'53	
minimum elong	-921 Apr 01 j 10:38	1° V 49'13	1°56'57	opposition	-913 Oct 23 j 05:29	21° V 02'42	-2°-3'-50
max. Earth dist.	-921 Apr 02 j 08:19	1° V 51'15	30.80412 AU	min. Earth dist.	-913 Oct 22 j 16:56	21° V 03'36	28.81146 AU
retrograde	-921 Jul 18 j 00:12	4° V 24'07		direct	-912 Jan 08 j 16:43	19° V 38'31	
opposition	-921 Oct 05 j 10:53	2° V 58'45	-2°-5'-22				
min. Earth dist.	-921 Oct 04 j 15:31	3° V 00'07	28.80674 AU	conjunction	-912 Apr 21 j 18:59	22° V 08'46	-1°-55'-20
direct	-921 Dec 21 j 19:44	1° V 35'01		minimum elong	-912 Apr 21 j 18:59	22° V 08'46	1°55'21
				max. Earth dist.	-912 Apr 22 j 09:38	22° V 10'08	30.81100 AU
conjunction	-920 Apr 03 j 00:38	4° V 04'39	-1°-57'-28	retrograde	-912 Aug 06 j 19:53	24° V 42'52	
minimum elong	-920 Apr 03 j 00:37	4° V 04'39	1°57'30	opposition	-912 Oct 24 j 16:19	23° V 17'42	-2°-2'-47
max. Earth dist.	-920 Apr 03 j 20:46	4° V 06'33	30.80658 AU	min. Earth dist.	-912 Oct 24 j 03:25	23° V 18'37	28.81343 AU
retrograde	-920 Jul 19 j 14:39	6° V 39'33		direct	-911 Jan 10 j 06:34	21° V 53'28	
opposition	-920 Oct 06 j 22:25	5° V 14'14	-2°-5'-51				
min. Earth dist.	-920 Oct 06 j 04:28	5° V 15'31	28.80926 AU	conjunction	-911 Apr 24 j 09:17	24° V 23'46	-1°-54'-16
direct	-920 Dec 23 j 06:00	3° V 50'30		minimum elong	-911 Apr 24 j 09:18	24° V 23'46	1°54'16
				max. Earth dist.	-911 Apr 24 j 22:30	24° V 25'00	30.81367 AU
conjunction	-919 Apr 05 j 14:58	6° V 20'16	-1°-57'-50	retrograde	-911 Aug 09 j 09:19	26° V 57'45	
minimum elong	-919 Apr 05 j 14:58	6° V 20'16	1°57'51	opposition	-911 Oct 27 j 03:22	25° V 32'38	-2°-1'-33
max. Earth dist.	-919 Apr 06 j 11:17	6° V 22'10	30.80884 AU	min. Earth dist.	-911 Oct 26 j 15:38	25° V 33'28	28.81688 AU
retrograde	-919 Jul 22 j 02:42	8° V 55'07		direct	-910 Jan 12 j 18:07	24° V 08'20	
opposition	-919 Oct 09 j 09:53	7° V 29'53	-2°-6'-8				
min. Earth dist.	-919 Oct 08 j 16:19	7° V 31'08	28.81109 AU	conjunction	-910 Apr 26 j 23:38	26° V 38'44	-1°-53'-1
direct	-919 Dec 25 j 18:31	6° V 06'08		minimum elong	-910 Apr 26 j 23:38	26° V 38'44	1°53'03
				max. Earth dist.	-910 Apr 27 j 13:16	26° V 40'00	30.81784 AU

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Attention, astronomical year style is used: The year -910 in astronomical counting style is the year 911 BCE in historical counting style.

retrograde	-910 Aug 11 j 21:11	29° Υ 12'36				-902 May 25 j 03:48	15° \mathcal{B}	
opposition	-910 Oct 29 j 14:14	27° Υ 47'32	-2°00'-7	retrograde		-902 Aug 30 j 00:43	17° \mathcal{B} 11'58	
min. Earth dist.	-910 Oct 29 j 02:32	27° Υ 48'22	28.82161 AU	opposition		-902 Nov 16 j 04:34	15° \mathcal{B} 47'24	-1°-42'-21
direct	-909 Jan 15 j 06:57	26° Υ 23'14		min. Earth dist.		-902 Nov 16 j 00:39	15° \mathcal{B} 47'41	28.86257 AU
						-902 Dec 15 j 16:05	15° $\mathcal{R}\mathcal{B}$	
conjunction	-909 Apr 29 j 13:54	28° Υ 53'42	-1°-51'-36	direct		-901 Feb 02 j 06:16	14° \mathcal{B} 22'46	
minimum elong	-909 Apr 29 j 13:54	28° Υ 53'42	1°51'37			-901 Mar 21 j 23:20	15° \mathcal{B}	
max. Earth dist.	-909 Apr 30 j 01:47	28° Υ 54'49	30.82330 AU					
	-909 May 30 j 02:19	0° \mathcal{B}		conjunction		-901 May 18 j 10:12	16° \mathcal{B} 53'51	-1°-34'-22
retrograde	-909 Aug 14 j 10:43	1° \mathcal{B} 27'28		minimum elong		-901 May 18 j 10:12	16° \mathcal{B} 53'51	1°34'22
opposition	-909 Nov 01 j 01:05	0° \mathcal{B} 02'29	-1°-58'-30	max. Earth dist.		-901 May 18 j 14:52	16° \mathcal{B} 54'18	30.86391 AU
min. Earth dist.	-909 Oct 31 j 14:10	0° \mathcal{B} 03'15	28.82760 AU	retrograde		-901 Sep 01 j 12:24	19° \mathcal{B} 26'28	
	-909 Nov 02 j 11:55	30° $\mathcal{R}\Upsilon$		opposition		-901 Nov 18 j 14:59	18° \mathcal{B} 01'57	-1°-39'-24
direct	-908 Jan 17 j 17:33	28° Υ 38'09		min. Earth dist.		-901 Nov 18 j 11:21	18° \mathcal{B} 02'12	28.86707 AU
	-908 Mar 30 j 09:27	0° \mathcal{B}		direct		-900 Feb 04 j 19:33	16° \mathcal{B} 37'15	
conjunction	-908 May 01 j 04:26	1° \mathcal{B} 08'44	-1°-50'-1	conjunction		-900 May 20 j 00:28	19° \mathcal{B} 08'23	-1°-31'-33
minimum elong	-908 May 01 j 04:26	1° \mathcal{B} 08'44	1°50'02	minimum elong		-900 May 20 j 00:28	19° \mathcal{B} 08'23	1°31'33
max. Earth dist.	-908 May 01 j 16:40	1° \mathcal{B} 09'53	30.82964 AU	max. Earth dist.		-900 May 20 j 03:14	19° \mathcal{B} 08'39	30.86897 AU
retrograde	-908 Aug 15 j 22:25	3° \mathcal{B} 42'23		retrograde		-900 Sep 03 j 01:49	21° \mathcal{B} 40'49	
opposition	-908 Nov 02 j 11:59	2° \mathcal{B} 17'30	-1°-56'-42	opposition		-900 Nov 20 j 01:28	20° \mathcal{B} 16'21	-1°-36'-19
min. Earth dist.	-908 Nov 02 j 02:12	2° \mathcal{B} 18'12	28.83400 AU	min. Earth dist.		-900 Nov 19 j 22:35	20° \mathcal{B} 16'33	28.87272 AU
direct	-907 Jan 19 j 04:57	0° \mathcal{B} 53'10						
conjunction	-907 May 03 j 18:58	3° \mathcal{B} 23'51	-1°-48'-15					
minimum elong	-907 May 03 j 18:58	3° \mathcal{B} 23'51	1°48'14					
max. Earth dist.	-907 May 04 j 05:13	3° \mathcal{B} 24'48	30.83615 AU					
retrograde	-907 Aug 18 j 11:21	5° \mathcal{B} 57'24						
opposition	-907 Nov 04 j 22:44	4° \mathcal{B} 32'36	-1°-54'-44					
min. Earth dist.	-907 Nov 04 j 13:23	4° \mathcal{B} 33'16	28.84036 AU					
direct	-906 Jan 21 j 16:00	3° \mathcal{B} 08'15						
conjunction	-906 May 06 j 09:38	5° \mathcal{B} 39'02	-1°-46'-19					
minimum elong	-906 May 06 j 09:39	5° \mathcal{B} 39'02	1°46'20					
max. Earth dist.	-906 May 06 j 19:25	5° \mathcal{B} 39'56	30.84217 AU					
retrograde	-906 Aug 20 j 22:07	8° \mathcal{B} 12'27						
opposition	-906 Nov 07 j 09:43	6° \mathcal{B} 47'44	-1°-52'-35					
min. Earth dist.	-906 Nov 07 j 02:07	6° \mathcal{B} 48'16	28.84600 AU					
direct	-905 Jan 24 j 03:52	5° \mathcal{B} 23'21						
conjunction	-905 May 09 j 00:07	7° \mathcal{B} 54'12	-1°-44'-14					
minimum elong	-905 May 09 j 00:07	7° \mathcal{B} 54'12	1°44'14					
max. Earth dist.	-905 May 09 j 08:18	7° \mathcal{B} 54'58	30.84752 AU					
retrograde	-905 Aug 23 j 11:30	10° \mathcal{B} 27'30						
opposition	-905 Nov 09 j 20:32	9° \mathcal{B} 02'50	-1°-50'-16					
min. Earth dist.	-905 Nov 09 j 13:00	9° \mathcal{B} 03'22	28.85082 AU					
direct	-904 Jan 26 j 16:29	7° \mathcal{B} 38'23						
conjunction	-904 May 10 j 14:47	10° \mathcal{B} 09'19	-1°-41'-59					
minimum elong	-904 May 10 j 14:47	10° \mathcal{B} 09'19	1°42'00					
max. Earth dist.	-904 May 10 j 21:47	10° \mathcal{B} 09'58	30.85194 AU					
retrograde	-904 Aug 24 j 22:58	12° \mathcal{B} 42'28						
opposition	-904 Nov 11 j 07:17	11° \mathcal{B} 17'50	-1°-47'-47					
min. Earth dist.	-904 Nov 11 j 01:50	11° \mathcal{B} 18'13	28.85492 AU					
direct	-903 Jan 28 j 03:50	9° \mathcal{B} 53'20						
conjunction	-903 May 13 j 05:27	12° \mathcal{B} 24'19	-1°-39'-36					
minimum elong	-903 May 13 j 05:27	12° \mathcal{B} 24'19	1°39'36					
max. Earth dist.	-903 May 13 j 11:43	12° \mathcal{B} 24'54	30.85592 AU					
retrograde	-903 Aug 27 j 12:16	14° \mathcal{B} 57'17						
opposition	-903 Nov 13 j 17:56	13° \mathcal{B} 32'42	-1°-45'-9					
min. Earth dist.	-903 Nov 13 j 12:32	13° \mathcal{B} 33'05	28.85864 AU					
direct	-902 Jan 30 j 18:09	12° \mathcal{B} 08'08						
conjunction	-902 May 15 j 19:45	14° \mathcal{B} 39'10	-1°-37'-3					
minimum elong	-902 May 15 j 19:45	14° \mathcal{B} 39'10	1°37'04					
max. Earth dist.	-902 May 16 j 00:21	14° \mathcal{B} 39'36	30.85967 AU					

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 1

Attention, astronomical year style is used: The year -900 in astronomical counting style is the year 901 BCE in historical counting style.

direct	-900 Feb 04 j 19:33	16° 8 37'15		opposition	-893 Dec 06 j 02:21	5° II 56'22	-1°-10'-52
				min. Earth dist.	-893 Dec 06 j 05:25	5° II 56'09	28.94028 AU
conjunction	-900 May 20 j 00:28	19° 8 08'23	-1°-31'-33	direct	-892 Feb 22 j 17:07	4° II 31'29	
minimum elong	-900 May 20 j 00:28	19° 8 08'23	1°31'33				
max. Earth dist.	-900 May 20 j 03:14	19° 8 08'39	30.86897 AU	conjunction	-892 Jun 07 j 18:41	7° II 03'10	-1°-4'-22
retrograde	-900 Sep 03 j 01:49	21° 8 40'49		minimum elong	-892 Jun 07 j 18:41	7° II 03'10	1°04'23
opposition	-900 Nov 20 j 01:28	20° 8 16'21	-1°-36'-19	max. Earth dist.	-892 Jun 07 j 15:02	7° II 02'49	30.94442 AU
min. Earth dist.	-900 Nov 19 j 22:35	20° 8 16'33	28.87272 AU	retrograde	-892 Sep 20 j 21:46	9° II 34'18	
direct	-899 Feb 06 j 07:05	18° 8 51'35		opposition	-892 Dec 07 j 12:47	8° II 10'33	-1°-6'-45
				min. Earth dist.	-892 Dec 07 j 16:30	8° II 10'17	28.94909 AU
conjunction	-899 May 22 j 14:50	21° 8 22'47	-1°-28'-35	direct	-891 Feb 24 j 06:40	6° II 45'38	
minimum elong	-899 May 22 j 14:50	21° 8 22'47	1°28'35				
max. Earth dist.	-899 May 22 j 18:02	21° 8 23'05	30.87522 AU	conjunction	-891 Jun 10 j 08:47	9° II 17'19	-1°00'-29
retrograde	-899 Sep 05 j 12:42	23° 8 55'03		minimum elong	-891 Jun 10 j 08:47	9° II 17'19	1°00'29
opposition	-899 Nov 22 j 11:53	22° 8 30'38	-1°-33'-5	max. Earth dist.	-891 Jun 10 j 02:51	9° II 16'46	30.95288 AU
min. Earth dist.	-899 Nov 22 j 09:52	22° 8 30'47	28.87960 AU	retrograde	-891 Sep 23 j 10:55	11° II 48'16	
direct	-898 Feb 08 j 19:02	21° 8 05'50		opposition	-891 Dec 09 j 23:09	10° II 24'33	-1°-2'-34
				min. Earth dist.	-891 Dec 10 j 03:54	10° II 24'13	28.95725 AU
conjunction	-898 May 25 j 05:00	23° 8 37'06	-1°-25'-29	direct	-890 Feb 26 j 19:16	8° II 59'34	
minimum elong	-898 May 25 j 05:00	23° 8 37'06	1°25'30				
max. Earth dist.	-898 May 25 j 06:31	23° 8 37'14	30.88302 AU	conjunction	-890 Jun 12 j 22:57	11° II 31'17	0°-56'-31
retrograde	-898 Sep 08 j 00:40	26° 8 09'12		minimum elong	-890 Jun 12 j 22:57	11° II 31'17	0°56'32
opposition	-898 Nov 24 j 22:16	24° 8 44'52	-1°-29'-42	max. Earth dist.	-890 Jun 12 j 17:07	11° II 30'44	30.96081 AU
min. Earth dist.	-898 Nov 24 j 20:11	24° 8 45'01	28.88815 AU	retrograde	-890 Sep 25 j 21:15	14° II 02'01	
direct	-897 Feb 11 j 06:17	23° 8 20'03		opposition	-890 Dec 12 j 09:29	12° II 38'21	0°-58'-17
				min. Earth dist.	-890 Dec 12 j 15:29	12° II 37'55	28.96496 AU
conjunction	-897 May 27 j 19:11	25° 8 51'23	-1°-22'-16	direct	-889 Mar 01 j 08:21	11° II 13'19	
minimum elong	-897 May 27 j 19:11	25° 8 51'23	1°22'16				
max. Earth dist.	-897 May 27 j 20:51	25° 8 51'32	30.89228 AU	conjunction	-889 Jun 15 j 12:45	13° II 45'01	0°-52'-28
retrograde	-897 Sep 10 j 10:32	28° 8 23'20		minimum elong	-889 Jun 15 j 12:46	13° II 45'01	0°52'28
opposition	-897 Nov 27 j 08:46	26° 8 59'07	-1°-26'-11	max. Earth dist.	-889 Jun 15 j 04:57	13° II 44'18	30.96861 AU
min. Earth dist.	-897 Nov 27 j 08:06	26° 8 59'09	28.89799 AU	retrograde	-889 Sep 28 j 09:09	16° II 15'33	
direct	-896 Feb 13 j 17:23	25° 8 34'17		opposition	-889 Dec 14 j 19:43	14° II 51'55	0°-53'-55
				min. Earth dist.	-889 Dec 15 j 01:56	14° II 51'29	28.97280 AU
conjunction	-896 May 29 j 09:27	28° 8 05'41	-1°-18'-55	direct	-888 Mar 02 j 20:29	13° II 26'49	
minimum elong	-896 May 29 j 09:27	28° 8 05'41	1°18'56				
max. Earth dist.	-896 May 29 j 09:43	28° 8 05'43	30.90281 AU	conjunction	-888 Jun 17 j 02:45	15° II 58'33	0°-48'-21
	-896 Jul 26 j 00:52	0° II		minimum elong	-888 Jun 17 j 02:45	15° II 58'33	0°48'21
retrograde	-896 Sep 11 j 23:32	0° II 37'30		max. Earth dist.	-888 Jun 16 j 18:58	15° II 57'50	30.97657 AU
	-896 Oct 30 j 18:31	30° R 8		retrograde	-888 Sep 29 j 18:43	18° II 28'52	
opposition	-896 Nov 28 j 18:59	29° 8 13'23	-1°-22'-32	opposition	-888 Dec 16 j 05:58	17° II 05'18	0°-49'-28
min. Earth dist.	-896 Nov 28 j 18:12	29° 8 13'27	28.90878 AU	min. Earth dist.	-888 Dec 16 j 13:43	17° II 04'45	28.98103 AU
direct	-895 Feb 15 j 04:34	27° 8 48'33		direct	-887 Mar 05 j 08:02	15° II 40'08	
	-895 May 22 j 23:33	0° II					
conjunction	-895 May 31 j 23:48	0° II 20'03	-1°-15'-27	conjunction	-887 Jun 19 j 16:27	18° II 11'53	0°-44'-10
minimum elong	-895 May 31 j 23:49	0° II 20'03	1°15'26	minimum elong	-887 Jun 19 j 16:27	18° II 11'53	0°44'10
max. Earth dist.	-895 May 31 j 23:17	0° II 20'00	30.91379 AU	max. Earth dist.	-887 Jun 19 j 07:18	18° II 11'02	30.98531 AU
retrograde	-895 Sep 14 j 09:48	2° II 51'43		retrograde	-887 Oct 02 j 06:42	20° II 42'00	
opposition	-895 Dec 01 j 05:31	1° II 27'43	-1°-18'-45	opposition	-887 Dec 18 j 16:10	19° II 18'30	0°-44'-57
min. Earth dist.	-895 Dec 01 j 06:42	1° II 27'38	28.91982 AU	min. Earth dist.	-887 Dec 18 j 23:28	19° II 17'59	28.99023 AU
direct	-894 Feb 17 j 15:23	0° II 02'54		direct	-886 Mar 07 j 19:33	17° II 53'18	
conjunction	-894 Jun 03 j 14:00	2° II 34'27	-1°-11'-51	conjunction	-886 Jun 22 j 05:57	20° II 25'03	0°-39'-55
minimum elong	-894 Jun 03 j 14:01	2° II 34'27	1°11'52	minimum elong	-886 Jun 22 j 05:57	20° II 25'04	0°39'55
max. Earth dist.	-894 Jun 03 j 12:40	2° II 34'20	30.92476 AU	max. Earth dist.	-886 Jun 21 j 20:31	20° II 24'11	30.99504 AU
retrograde	-894 Sep 16 j 22:02	5° II 05'58		retrograde	-886 Oct 04 j 15:50	22° II 55'01	
opposition	-894 Dec 03 j 15:55	3° II 42'04	-1°-14'-52	opposition	-886 Dec 21 j 02:32	21° II 31'36	0°-40'-23
min. Earth dist.	-894 Dec 03 j 17:15	3° II 41'58	28.93042 AU	min. Earth dist.	-886 Dec 21 j 11:18	21° II 30'59	29.00066 AU
direct	-893 Feb 20 j 05:23	2° II 17'14		direct	-885 Mar 10 j 06:21	20° II 06'23	
conjunction	-893 Jun 06 j 04:17	4° II 48'51	-1°-8'-10	conjunction	-885 Jun 24 j 19:31	22° II 38'11	0°-35'-36
minimum elong	-893 Jun 06 j 04:17	4° II 48'51	1°08'10	minimum elong	-885 Jun 24 j 19:31	22° II 38'11	0°35'36
max. Earth dist.	-893 Jun 06 j 01:07	4° II 48'33	30.93499 AU	max. Earth dist.	-885 Jun 24 j 09:37	22° II 37'16	31.00620 AU
retrograde	-893 Sep 19 j 09:56	7° II 20'12		retrograde	-885 Oct 07 j 02:56	25° II 07'59	
				opposition	-885 Dec 23 j 12:35	23° II 44'39	0°-35'-44

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 2

Attention, astronomical year style is used: The year -885 in astronomical counting style is the year 886 BCE in historical counting style.

min. Earth dist.	-885 Dec 23 j 21:05	23°II44'03	29.01230 AU	asc. node	-877 Jun 27 j 06:27	9°☾48'19	
direct	-884 Mar 11 j 19:21	22°II19'27					
conjunction	-884 Jun 26 j 09:05	24°II51'18	0°-31'-14	conjunction	-877 Jul 13 j 06:31	10°☾23'38	0°00'12
minimum elong	-884 Jun 26 j 09:05	24°II51'18	0°31'15	minimum elong	-877 Jul 13 j 06:30	10°☾23'38	0°00'13
max. Earth dist.	-884 Jun 25 j 22:01	24°II50'17	31.01839 AU	behind sun begin	-877 Jul 13 j 00:00	10°☾23'04	
retrograde	-884 Oct 08 j 14:13	27°II20'58		behind sun end	-877 Jul 13 j 13:00	10°☾24'13	
opposition	-884 Dec 24 j 22:53	25°II57'46	0°-31'-3	max. Earth dist.	-877 Jul 12 j 13:09	10°☾22'02	31.09439 AU
min. Earth dist.	-884 Dec 25 j 08:39	25°II57'04	29.02495 AU	retrograde	-877 Oct 24 j 19:13	12°☾52'13	
direct	-883 Mar 14 j 06:06	24°II32'35		opposition	-876 Jan 09 j 23:15	11°☾29'33	0°02'35
				min. Earth dist.	-876 Jan 10 j 15:18	11°☾28'25	29.09841 AU
				direct	-876 Mar 29 j 20:32	10°☾04'17	
conjunction	-883 Jun 28 j 22:35	27°II04'30	0°-26'-50				
minimum elong	-883 Jun 28 j 22:35	27°II04'30	0°26'49	conjunction	-876 Jul 14 j 19:27	12°☾36'17	0°04'47
max. Earth dist.	-883 Jun 28 j 11:34	27°II03'29	31.03131 AU	minimum elong	-876 Jul 14 j 19:28	12°☾36'17	0°04'48
retrograde	-883 Oct 11 j 01:35	29°II34'02		behind sun begin	-876 Jul 14 j 13:03	12°☾35'42	
opposition	-883 Dec 27 j 09:08	28°II10'57	0°-26'-19	behind sun end	-876 Jul 15 j 01:52	12°☾36'51	
min. Earth dist.	-883 Dec 27 j 19:19	28°II10'14	29.03785 AU	max. Earth dist.	-876 Jul 14 j 01:28	12°☾34'37	31.10212 AU
direct	-882 Mar 16 j 19:01	26°II45'48		retrograde	-876 Oct 26 j 05:06	15°☾04'39	
				opposition	-875 Jan 11 j 09:31	13°☾42'01	0°07'25
conjunction	-882 Jul 01 j 11:59	29°II17'47	0°-22'-23	min. Earth dist.	-875 Jan 12 j 01:22	13°☾40'55	29.10605 AU
minimum elong	-882 Jul 01 j 11:59	29°II17'47	0°22'23	direct	-875 Apr 01 j 09:18	12°☾16'42	
max. Earth dist.	-882 Jun 30 j 23:01	29°II16'35	31.04418 AU				
	-882 Jul 20 j 16:23	0°☾		conjunction	-875 Jul 17 j 08:07	14°☾48'39	0°09'16
retrograde	-882 Oct 13 j 14:55	1°☾47'11		minimum elong	-875 Jul 17 j 08:06	14°☾48'39	0°09'17
opposition	-882 Dec 29 j 19:24	0°☾24'12	0°-21'-32	behind sun begin	-875 Jul 17 j 02:36	14°☾48'10	
min. Earth dist.	-882 Dec 30 j 06:27	0°☾23'26	29.05059 AU	behind sun end	-875 Jul 17 j 13:37	14°☾49'08	
	-881 Jan 13 j 08:12	30°RII		max. Earth dist.	-875 Jul 16 j 13:14	14°☾46'55	31.10983 AU
direct	-881 Mar 19 j 07:25	28°II59'05		retrograde	-875 Oct 28 j 15:07	17°☾16'52	
	-881 May 21 j 05:48	0°☾		opposition	-874 Jan 13 j 19:52	15°☾54'15	0°12'13
				min. Earth dist.	-874 Jan 14 j 12:43	15°☾53'04	29.11418 AU
conjunction	-881 Jul 04 j 01:31	1°☾31'07	0°-17'-54	direct	-874 Apr 03 j 19:30	14°☾28'52	
minimum elong	-881 Jul 04 j 01:31	1°☾31'07	0°17'53				
max. Earth dist.	-881 Jul 03 j 12:38	1°☾29'56	31.05646 AU	conjunction	-874 Jul 19 j 20:44	17°☾00'47	0°13'45
retrograde	-881 Oct 16 j 01:14	4°☾00'23		minimum elong	-874 Jul 19 j 20:44	17°☾00'47	0°13'45
opposition	-880 Jan 01 j 05:51	2°☾37'30	0°-16'-44	behind sun begin	-874 Jul 19 j 17:22	17°☾00'29	
min. Earth dist.	-880 Jan 01 j 18:17	2°☾36'37	29.06227 AU	behind sun end	-874 Jul 20 j 00:06	17°☾01'05	
direct	-880 Mar 20 j 20:43	1°☾12'23		max. Earth dist.	-874 Jul 19 j 02:14	16°☾59'05	31.11833 AU
				retrograde	-874 Oct 31 j 00:52	19°☾28'50	
conjunction	-880 Jul 05 j 14:54	3°☾44'26	0°-13'-24	opposition	-873 Jan 16 j 06:06	18°☾06'15	0°17'00
minimum elong	-880 Jul 05 j 14:54	3°☾44'26	0°13'24	min. Earth dist.	-873 Jan 16 j 22:57	18°☾05'04	29.12312 AU
behind sun begin	-880 Jul 05 j 11:18	3°☾44'07		direct	-873 Apr 06 j 08:52	16°☾40'51	
behind sun end	-880 Jul 05 j 18:31	3°☾44'45					
max. Earth dist.	-880 Jul 04 j 23:51	3°☾43'03	31.06760 AU	conjunction	-873 Jul 22 j 09:10	19°☾12'44	0°18'12
retrograde	-880 Oct 17 j 13:28	6°☾13'32		minimum elong	-873 Jul 22 j 09:09	19°☾12'44	0°18'13
opposition	-879 Jan 02 j 16:09	4°☾50'45	0°-11'-54	max. Earth dist.	-873 Jul 21 j 13:17	19°☾10'54	31.12783 AU
min. Earth dist.	-879 Jan 03 j 04:53	4°☾49'51	29.07284 AU	retrograde	-873 Nov 02 j 12:46	21°☾40'38	
direct	-879 Mar 23 j 09:01	3°☾25'36		opposition	-872 Jan 18 j 16:25	20°☾18'06	0°21'46
				min. Earth dist.	-872 Jan 19 j 09:26	20°☾16'54	29.13328 AU
conjunction	-879 Jul 08 j 04:22	5°☾57'41	0°-8'-53	direct	-872 Apr 07 j 20:50	18°☾52'41	
minimum elong	-879 Jul 08 j 04:22	5°☾57'41	0°08'54				
behind sun begin	-879 Jul 07 j 22:44	5°☾57'11		conjunction	-872 Jul 23 j 21:40	21°☾24'35	0°22'38
behind sun end	-879 Jul 08 j 09:59	5°☾58'11		minimum elong	-872 Jul 23 j 21:39	21°☾24'35	0°22'39
max. Earth dist.	-879 Jul 07 j 13:12	5°☾56'17	31.07749 AU	max. Earth dist.	-872 Jul 23 j 02:35	21°☾22'49	31.13849 AU
retrograde	-879 Oct 19 j 23:32	8°☾26'37		retrograde	-872 Nov 03 j 22:16	23°☾52'21	
opposition	-878 Jan 05 j 02:41	7°☾03'52	0°-7'-4	opposition	-871 Jan 20 j 02:47	22°☾29'53	0°26'29
min. Earth dist.	-878 Jan 05 j 17:07	7°☾02'52	29.08217 AU	min. Earth dist.	-871 Jan 20 j 20:36	22°☾28'38	29.14438 AU
direct	-878 Mar 25 j 21:09	5°☾38'43		direct	-871 Apr 10 j 09:35	21°☾04'30	
conjunction	-878 Jul 10 j 17:21	8°☾10'46	0°-4'-23	conjunction	-871 Jul 26 j 09:55	23°☾36'23	0°27'02
minimum elong	-878 Jul 10 j 17:22	8°☾10'46	0°04'24	minimum elong	-871 Jul 26 j 09:55	23°☾36'23	0°27'03
behind sun begin	-878 Jul 10 j 10:54	8°☾10'11		max. Earth dist.	-871 Jul 25 j 13:30	23°☾34'30	31.15008 AU
behind sun end	-878 Jul 10 j 23:49	8°☾11'20		retrograde	-871 Nov 06 j 10:33	26°☾04'03	
max. Earth dist.	-878 Jul 10 j 00:34	8°☾09'13	31.08639 AU	opposition	-870 Jan 22 j 13:08	24°☾41'40	0°31'10
retrograde	-878 Oct 22 j 11:10	10°☾39'31		min. Earth dist.	-870 Jan 23 j 06:36	24°☾40'27	29.15630 AU
opposition	-877 Jan 07 j 12:58	9°☾16'49	0°-2'-14	direct	-870 Apr 12 j 21:32	23°☾16'19	
min. Earth dist.	-877 Jan 08 j 03:14	9°☾15'49	29.09059 AU				
direct	-877 Mar 28 j 09:17	7°☾51'37		conjunction	-870 Jul 28 j 22:07	25°☾48'13	0°31'24

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 3

Attention, astronomical year style is used: The year -870 in astronomical counting style is the year 871 BCE in historical counting style.

minimum elong	-870 Jul 28 j 22:07	25° 48 '13	0°31'25	conjunction	-862 Aug 15 j 20:56	13° 02 '21	1°04'02
max. Earth dist.	-870 Jul 28 j 02:17	25° 46 '23	31.16199 AU	minimum elong	-862 Aug 15 j 20:56	13° 02 '21	1°04'02
retrograde	-870 Nov 08 j 20:41	28° 51 '47		max. Earth dist.	-862 Aug 14 j 20:31	13° 01 '905	31.22868 AU
opposition	-869 Jan 24 j 23:39	26° 53 '30	0°35'48		-862 Oct 03 j 02:47	15° 00	
min. Earth dist.	-869 Jan 25 j 18:32	26° 52 '11	29.16816 AU	retrograde	-862 Nov 26 j 06:21	15° 04 '806	
direct	-869 Apr 15 j 09:47	25° 52 '11			-861 Jan 21 j 11:13	15° 04	
				opposition	-861 Feb 11 j 12:22	14° 02 '605	1°10'21
conjunction	-869 Jul 31 j 10:18	28° 50 '06	0°35'43	min. Earth dist.	-861 Feb 12 j 09:48	14° 02 '436	29.23284 AU
minimum elong	-869 Jul 31 j 10:17	28° 50 '06	0°35'44	direct	-861 May 03 j 09:00	13° 00 '46	
max. Earth dist.	-869 Jul 30 j 13:07	27° 58 '08	31.17363 AU		-861 Aug 03 j 17:43	15° 00	
	-869 Oct 01 j 19:49	0° 00		max. Earth dist.	-861 Aug 17 j 08:53	15° 03 '011	31.23584 AU
retrograde	-869 Nov 11 j 08:13	0° 02 '733					
	-869 Dec 22 j 15:16	30° 04 ' 58		conjunction	-861 Aug 18 j 08:18	15° 03 '222	1°07'44
opposition	-868 Jan 27 j 10:00	29° 05 '21	0°40'23	minimum elong	-861 Aug 18 j 08:17	15° 03 '221	1°07'44
min. Earth dist.	-868 Jan 28 j 04:31	29° 04 '04	29.17942 AU	retrograde	-861 Nov 28 j 16:20	17° 05 '900	
direct	-868 Apr 16 j 22:08	27° 40 '04		opposition	-860 Feb 13 j 23:03	16° 03 '701	1°14'16
	-868 Jul 27 j 13:28	0° 00		min. Earth dist.	-860 Feb 14 j 21:21	16° 03 '529	29.24057 AU
				direct	-860 May 04 j 21:59	15° 01 '143	
conjunction	-868 Aug 01 j 22:34	0° 01 '1'59	0°39'59				
minimum elong	-868 Aug 01 j 22:34	0° 01 '1'59	0°39'59	conjunction	-860 Aug 19 j 19:25	17° 04 '316	1°11'21
max. Earth dist.	-868 Aug 01 j 01:03	0° 01 '10'00	31.18429 AU	minimum elong	-860 Aug 19 j 19:25	17° 04 '316	1°11'21
retrograde	-868 Nov 12 j 17:00	2° 03 '921		max. Earth dist.	-860 Aug 18 j 19:27	17° 04 '102	31.24417 AU
opposition	-867 Jan 28 j 20:42	1° 01 '7'13	0°44'55	retrograde	-860 Nov 30 j 03:23	20° 00 '0951	
min. Earth dist.	-867 Jan 29 j 16:50	1° 01 '15'49	29.18967 AU	opposition	-859 Feb 15 j 09:45	18° 04 '754	1°18'04
	-867 Mar 27 j 21:04	30° 04 ' 58		min. Earth dist.	-859 Feb 16 j 06:51	18° 04 '627	29.24945 AU
direct	-867 Apr 19 j 09:03	29° 05 '1'58		direct	-859 May 07 j 10:44	17° 02 '238	
	-867 May 11 j 16:20	0° 00		max. Earth dist.	-859 Aug 21 j 06:56	19° 05 '158	31.25346 AU
conjunction	-867 Aug 04 j 10:33	2° 02 '3'51	0°44'11	conjunction	-859 Aug 22 j 06:25	19° 05 '409	1°14'51
minimum elong	-867 Aug 04 j 10:32	2° 02 '3'51	0°44'11	minimum elong	-859 Aug 22 j 06:25	19° 05 '409	1°14'51
max. Earth dist.	-867 Aug 03 j 12:28	2° 02 '1'48	31.19391 AU	retrograde	-859 Dec 02 j 11:59	22° 02 '041	
retrograde	-867 Nov 15 j 02:50	4° 05 '1'07		opposition	-858 Feb 17 j 20:37	20° 05 '848	1°21'45
opposition	-866 Jan 31 j 07:18	3° 02 '9'02	0°49'22	min. Earth dist.	-858 Feb 18 j 18:38	20° 05 '717	29.25924 AU
min. Earth dist.	-866 Feb 01 j 03:14	3° 02 '7'39	29.19863 AU	direct	-858 May 09 j 21:27	19° 03 '336	
direct	-866 Apr 21 j 21:23	2° 00 '3'47					
				conjunction	-858 Aug 24 j 17:25	22° 00 '5'05	1°18'15
conjunction	-866 Aug 06 j 22:32	4° 03 '35'39	0°48'19	minimum elong	-858 Aug 24 j 17:25	22° 00 '5'05	1°18'15
minimum elong	-866 Aug 06 j 22:32	4° 03 '35'39	0°48'19	max. Earth dist.	-858 Aug 23 j 18:05	22° 00 '2'55	31.26351 AU
max. Earth dist.	-866 Aug 05 j 23:28	4° 03 '33'31	31.20222 AU	retrograde	-858 Dec 04 j 21:46	24° 03 '1'34	
retrograde	-866 Nov 17 j 12:53	7° 00 '2'49		opposition	-857 Feb 20 j 07:16	23° 00 '9'45	1°25'19
opposition	-865 Feb 02 j 17:51	5° 04 '40'46	0°53'44	min. Earth dist.	-857 Feb 21 j 04:41	23° 00 '8'17	29.26931 AU
min. Earth dist.	-865 Feb 03 j 14:55	5° 03 '39'19	29.20654 AU	direct	-857 May 12 j 09:33	21° 04 '44'37	
direct	-865 Apr 24 j 07:04	4° 01 '15'30		max. Earth dist.	-857 Aug 26 j 04:35	24° 01 '3'51	31.27343 AU
max. Earth dist.	-865 Aug 08 j 11:35	6° 04 '5'12	31.20957 AU				
				conjunction	-857 Aug 27 j 04:25	24° 01 '6'04	1°21'32
conjunction	-865 Aug 09 j 10:29	6° 04 '7'20	0°52'22	minimum elong	-857 Aug 27 j 04:25	24° 01 '6'04	1°21'32
minimum elong	-865 Aug 09 j 10:29	6° 04 '7'20	0°52'23	retrograde	-857 Dec 07 j 07:56	26° 00 '42'32	
retrograde	-865 Nov 19 j 22:11	9° 01 '14'23		opposition	-856 Feb 22 j 18:15	25° 02 '0'46	1°28'46
opposition	-864 Feb 05 j 04:29	7° 05 '2'22	0°58'02	min. Earth dist.	-856 Feb 23 j 16:19	25° 01 '9'15	29.27914 AU
min. Earth dist.	-864 Feb 06 j 01:48	7° 05 '0'53	29.21335 AU	direct	-856 May 13 j 19:07	23° 05 '55'41	
direct	-864 Apr 25 j 20:32	6° 02 '7'05					
				conjunction	-856 Aug 28 j 15:23	26° 02 '7'06	1°24'42
conjunction	-864 Aug 10 j 22:08	8° 05 '8'51	0°56'20	minimum elong	-856 Aug 28 j 15:22	26° 02 '7'06	1°24'42
minimum elong	-864 Aug 10 j 22:08	8° 05 '8'51	0°56'21	max. Earth dist.	-856 Aug 27 j 16:10	26° 02 '4'56	31.28278 AU
max. Earth dist.	-864 Aug 09 j 21:50	8° 05 '6'36	31.21602 AU	retrograde	-856 Dec 08 j 16:40	28° 00 '53'32	
retrograde	-864 Nov 21 j 09:38	11° 01 '25'48		opposition	-855 Feb 24 j 05:20	27° 03 '1'49	1°32'05
opposition	-863 Feb 06 j 15:05	10° 02 '03'47	1°02'14	min. Earth dist.	-855 Feb 25 j 03:27	27° 03 '0'18	29.28797 AU
min. Earth dist.	-863 Feb 07 j 12:35	10° 02 '02'18	29.21971 AU	direct	-855 May 16 j 08:02	26° 00 '6'47	
direct	-863 Apr 28 j 08:10	8° 03 '8'29		max. Earth dist.	-855 Aug 30 j 01:46	28° 02 '35'52	31.29102 AU
max. Earth dist.	-863 Aug 12 j 10:22	11° 00 '8'02	31.22222 AU				
				conjunction	-855 Aug 31 j 02:12	28° 03 '8'08	1°27'44
conjunction	-863 Aug 13 j 09:46	11° 01 '10'12	1°00'14	minimum elong	-855 Aug 31 j 02:12	28° 03 '8'08	1°27'44
minimum elong	-863 Aug 13 j 09:46	11° 01 '10'12	1°00'15		-855 Oct 08 j 19:15	0° 00 ' 00	
retrograde	-863 Nov 23 j 18:34	13° 03 '7'02		retrograde	-855 Dec 11 j 03:50	1° 00 ' 00 '04'32	
opposition	-862 Feb 09 j 01:48	12° 01 '15'01	1°06'21		-854 Feb 16 j 04:40	30° 04 ' 00	
min. Earth dist.	-862 Feb 09 j 23:59	12° 01 '13'29	29.22598 AU	opposition	-854 Feb 26 j 16:24	29° 04 '2'51	1°35'16
direct	-862 Apr 30 j 20:32	10° 04 '49'42		min. Earth dist.	-854 Feb 27 j 14:31	29° 04 '1'20	29.29574 AU

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Attention, astronomical year style is used: The year -854 in astronomical counting style is the year 855 BCE in historical counting style.

direct	-854 May 18 j 18:13	28° <u>Q</u> 17'50		conjunction	-846 Sep 19 j 23:15	18° <u>Q</u> 12'55	1°48'57
	-854 Aug 11 j 04:04	0° <u>Q</u>		minimum elong	-846 Sep 19 j 23:14	18° <u>Q</u> 12'55	1°48'58
				max. Earth dist.	-846 Sep 19 j 00:40	18° <u>Q</u> 10'48	31.33087 AU
conjunction	-854 Sep 02 j 13:02	0° <u>Q</u> 49'08	1°30'39	retrograde	-846 Dec 30 j 21:26	20° <u>Q</u> 39'10	
minimum elong	-854 Sep 02 j 13:02	0° <u>Q</u> 49'08	1°30'40	opposition	-845 Mar 18 j 21:58	19° <u>Q</u> 17'27	1°57'15
max. Earth dist.	-854 Sep 01 j 13:28	0° <u>Q</u> 46'56	31.29800 AU	min. Earth dist.	-845 Mar 19 j 18:27	19° <u>Q</u> 16'03	29.33494 AU
retrograde	-854 Dec 13 j 12:56	3° <u>Q</u> 15'30		direct	-845 Jun 08 j 04:32	17° <u>Q</u> 52'42	
opposition	-853 Mar 01 j 03:39	1° <u>Q</u> 53'49	1°38'18				
min. Earth dist.	-853 Mar 02 j 02:36	1° <u>Q</u> 52'14	29.30198 AU	conjunction	-845 Sep 22 j 09:15	20° <u>Q</u> 23'20	1°50'34
direct	-853 May 21 j 06:06	0° <u>Q</u> 28'50		minimum elong	-845 Sep 22 j 09:15	20° <u>Q</u> 23'20	1°50'34
				max. Earth dist.	-845 Sep 21 j 12:08	20° <u>Q</u> 21'21	31.33626 AU
conjunction	-853 Sep 04 j 23:42	3° <u>Q</u> 00'03	1°33'26	retrograde	-844 Jan 02 j 06:39	22° <u>Q</u> 49'38	
minimum elong	-853 Sep 04 j 23:42	3° <u>Q</u> 00'03	1°33'26	opposition	-844 Mar 20 j 09:33	21° <u>Q</u> 27'57	1°58'53
max. Earth dist.	-853 Sep 03 j 22:55	2° <u>Q</u> 57'44	31.30353 AU	min. Earth dist.	-844 Mar 21 j 06:27	21° <u>Q</u> 26'31	29.34014 AU
retrograde	-853 Dec 16 j 00:40	5° <u>Q</u> 26'22		direct	-844 Jun 09 j 15:23	20° <u>Q</u> 03'18	
opposition	-852 Mar 02 j 14:42	4° <u>Q</u> 04'40	1°41'12				
min. Earth dist.	-852 Mar 03 j 13:01	4° <u>Q</u> 03'09	29.30689 AU	conjunction	-844 Sep 23 j 19:06	22° <u>Q</u> 33'52	1°52'02
direct	-852 May 22 j 18:34	2° <u>Q</u> 39'41		minimum elong	-844 Sep 23 j 19:05	22° <u>Q</u> 33'52	1°52'02
max. Earth dist.	-852 Sep 05 j 10:28	5° <u>Q</u> 08'36	31.30775 AU	max. Earth dist.	-844 Sep 22 j 21:21	22° <u>Q</u> 31'50	31.34124 AU
				retrograde	-843 Jan 03 j 18:56	25° <u>Q</u> 00'14	
conjunction	-852 Sep 06 j 10:25	5° <u>Q</u> 10'50	1°36'05	opposition	-843 Mar 22 j 21:12	23° <u>Q</u> 38'34	2°00'21
minimum elong	-852 Sep 06 j 10:25	5° <u>Q</u> 10'50	1°36'06	min. Earth dist.	-843 Mar 23 j 17:00	23° <u>Q</u> 37'13	29.34476 AU
retrograde	-852 Dec 17 j 10:43	7° <u>Q</u> 37'06		direct	-843 Jun 12 j 03:11	22° <u>Q</u> 13'59	
opposition	-851 Mar 05 j 02:05	6° <u>Q</u> 15'23	1°43'58	max. Earth dist.	-843 Sep 25 j 08:17	24° <u>Q</u> 42'35	31.34521 AU
min. Earth dist.	-851 Mar 06 j 01:24	6° <u>Q</u> 13'48	29.31065 AU				
direct	-851 May 25 j 07:29	4° <u>Q</u> 50'25		conjunction	-843 Sep 26 j 04:57	24° <u>Q</u> 44'31	1°53'19
				minimum elong	-843 Sep 26 j 04:57	24° <u>Q</u> 44'31	1°53'19
conjunction	-851 Sep 08 j 20:42	7° <u>Q</u> 21'27	1°38'36	retrograde	-842 Jan 06 j 05:46	27° <u>Q</u> 10'56	
minimum elong	-851 Sep 08 j 20:42	7° <u>Q</u> 21'27	1°38'36	opposition	-842 Mar 25 j 09:03	25° <u>Q</u> 49'16	2°01'39
max. Earth dist.	-851 Sep 07 j 20:17	7° <u>Q</u> 19'10	31.31114 AU	min. Earth dist.	-842 Mar 26 j 05:41	25° <u>Q</u> 47'52	29.34817 AU
retrograde	-851 Dec 19 j 21:29	9° <u>Q</u> 47'41		direct	-842 Jun 14 j 15:19	24° <u>Q</u> 24'46	
opposition	-850 Mar 07 j 13:15	8° <u>Q</u> 25'56	1°46'34				
min. Earth dist.	-850 Mar 08 j 11:26	8° <u>Q</u> 24'25	29.31375 AU	conjunction	-842 Sep 28 j 14:47	26° <u>Q</u> 55'13	1°54'27
direct	-850 May 27 j 20:36	7° <u>Q</u> 00'58		minimum elong	-842 Sep 28 j 14:47	26° <u>Q</u> 55'13	1°54'27
max. Earth dist.	-850 Sep 10 j 07:04	9° <u>Q</u> 29'40	31.31401 AU	max. Earth dist.	-842 Sep 27 j 17:46	26° <u>Q</u> 53'15	31.34796 AU
				retrograde	-841 Jan 08 j 16:56	29° <u>Q</u> 21'41	
conjunction	-850 Sep 11 j 07:03	9° <u>Q</u> 31'54	1°40'58	opposition	-841 Mar 27 j 20:39	28° <u>Q</u> 00'01	2°02'46
minimum elong	-850 Sep 11 j 07:03	9° <u>Q</u> 31'54	1°40'58	min. Earth dist.	-841 Mar 28 j 16:08	27° <u>Q</u> 58'42	29.35012 AU
retrograde	-850 Dec 22 j 06:22	11° <u>Q</u> 58'05		direct	-841 Jun 17 j 03:47	26° <u>Q</u> 35'33	
opposition	-849 Mar 10 j 00:27	10° <u>Q</u> 36'19	1°49'02	max. Earth dist.	-841 Sep 30 j 03:52	29° <u>Q</u> 03'59	31.34905 AU
min. Earth dist.	-849 Mar 10 j 23:24	10° <u>Q</u> 34'45	29.31677 AU				
direct	-849 May 30 j 08:01	9° <u>Q</u> 11'21		conjunction	-841 Oct 01 j 00:43	29° <u>Q</u> 05'56	1°55'25
				minimum elong	-841 Oct 01 j 00:43	29° <u>Q</u> 05'56	1°55'25
conjunction	-849 Sep 13 j 17:17	11° <u>Q</u> 42'12	1°43'11		-841 Oct 25 j 14:25	0° <u>Q</u>	
minimum elong	-849 Sep 13 j 17:17	11° <u>Q</u> 42'12	1°43'11	retrograde	-840 Jan 11 j 02:54	1° <u>Q</u> 32'26	
max. Earth dist.	-849 Sep 12 j 17:53	11° <u>Q</u> 40'01	31.31717 AU	opposition	-840 Mar 29 j 08:38	0° <u>Q</u> 10'44	2°03'43
retrograde	-849 Dec 24 j 15:48	14° <u>Q</u> 08'22		min. Earth dist.	-840 Mar 30 j 04:54	0° <u>Q</u> 09'22	29.35053 AU
opposition	-848 Mar 11 j 11:46	12° <u>Q</u> 46'35	1°51'19		-840 Apr 04 j 23:27	30° <u>Q</u>	
min. Earth dist.	-848 Mar 12 j 09:35	12° <u>Q</u> 45'06	29.32016 AU	direct	-840 Jun 18 j 15:47	28° <u>Q</u> 46'19	
direct	-848 May 31 j 20:59	11° <u>Q</u> 21'39			-840 Aug 27 j 16:12	0° <u>Q</u>	
max. Earth dist.	-848 Sep 14 j 03:55	13° <u>Q</u> 50'14	31.32088 AU				
				conjunction	-840 Oct 02 j 10:23	1° <u>Q</u> 16'35	1°56'14
conjunction	-848 Sep 15 j 03:18	13° <u>Q</u> 52'25	1°45'16	minimum elong	-840 Oct 02 j 10:23	1° <u>Q</u> 16'35	1°56'14
minimum elong	-848 Sep 15 j 03:18	13° <u>Q</u> 52'25	1°45'16	max. Earth dist.	-840 Oct 01 j 14:08	1° <u>Q</u> 14'42	31.34873 AU
retrograde	-848 Dec 26 j 01:49	16° <u>Q</u> 18'36		retrograde	-839 Jan 12 j 13:06	3° <u>Q</u> 43'07	
opposition	-847 Mar 13 j 23:11	14° <u>Q</u> 56'49	1°53'28	opposition	-839 Mar 31 j 20:33	2° <u>Q</u> 21'22	2°04'30
min. Earth dist.	-847 Mar 14 j 20:54	14° <u>Q</u> 55'20	29.32445 AU	min. Earth dist.	-839 Apr 01 j 15:52	2° <u>Q</u> 20'04	29.34941 AU
direct	-847 Jun 03 j 06:57	13° <u>Q</u> 31'55		direct	-839 Jun 21 j 05:49	0° <u>Q</u> 56'57	
conjunction	-847 Sep 17 j 13:24	16° <u>Q</u> 02'38	1°47'11	conjunction	-839 Oct 04 j 20:02	3° <u>Q</u> 27'07	1°56'52
minimum elong	-847 Sep 17 j 13:23	16° <u>Q</u> 02'38	1°47'11	minimum elong	-839 Oct 04 j 20:02	3° <u>Q</u> 27'07	1°56'52
max. Earth dist.	-847 Sep 16 j 15:23	16° <u>Q</u> 00'34	31.32558 AU	max. Earth dist.	-839 Oct 03 j 23:31	3° <u>Q</u> 25'12	31.34703 AU
retrograde	-847 Dec 28 j 10:16	18° <u>Q</u> 28'50		retrograde	-838 Jan 14 j 23:09	5° <u>Q</u> 53'40	
opposition	-846 Mar 16 j 10:33	17° <u>Q</u> 07'05	1°55'26	opposition	-838 Apr 03 j 08:23	4° <u>Q</u> 31'51	2°05'06
min. Earth dist.	-846 Mar 17 j 07:41	17° <u>Q</u> 05'38	29.32945 AU	min. Earth dist.	-838 Apr 04 j 03:47	4° <u>Q</u> 30'32	29.34734 AU
direct	-846 Jun 05 j 19:15	15° <u>Q</u> 42'16		direct	-838 Jun 23 j 16:39	3° <u>Q</u> 07'26	
				max. Earth dist.	-838 Oct 06 j 10:27	5° <u>Q</u> 35'41	31.34457 AU

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Attention, astronomical year style is used: The year -838 in astronomical counting style is the year 839 BCE in historical counting style.

conjunction	-838 Oct 07 j 05:34	5° <u>♂</u> 37'28	1°57'21	opposition	-829 Apr 23 j 21:20	24° <u>♂</u> 03'27	2°02'28
minimum elong	-838 Oct 07 j 05:34	5° <u>♂</u> 37'28	1°57'21	min. Earth dist.	-829 Apr 24 j 10:29	24° <u>♂</u> 02'34	29.33559 AU
retrograde	-837 Jan 17 j 06:53	8° <u>♂</u> 04'02		direct	-829 Jul 13 j 23:54	22° <u>♂</u> 39'30	
opposition	-837 Apr 05 j 20:18	6° <u>♂</u> 42'09	2°05'31				
min. Earth dist.	-837 Apr 06 j 15:05	6° <u>♂</u> 40'53	29.34457 AU	conjunction	-829 Oct 26 j 16:31	25° <u>♂</u> 08'48	1°54'07
direct	-837 Jun 26 j 05:38	5° <u>♂</u> 17'44		minimum elong	-829 Oct 26 j 16:32	25° <u>♂</u> 08'48	1°54'06
				max. Earth dist.	-829 Oct 26 j 04:01	25° <u>♂</u> 07'37	31.33276 AU
conjunction	-837 Oct 09 j 14:50	7° <u>♂</u> 47'38	1°57'39	retrograde	-828 Feb 06 j 05:14	27° <u>♂</u> 36'11	
minimum elong	-837 Oct 09 j 14:50	7° <u>♂</u> 47'38	1°57'39	opposition	-828 Apr 25 j 09:50	26° <u>♂</u> 14'02	2°01'17
max. Earth dist.	-837 Oct 08 j 19:21	7° <u>♂</u> 45'49	31.34180 AU	min. Earth dist.	-828 Apr 25 j 22:24	26° <u>♂</u> 13'11	29.33215 AU
retrograde	-836 Jan 19 j 17:16	10° <u>♂</u> 14'14		direct	-828 Jul 15 j 12:50	24° <u>♂</u> 50'09	
opposition	-836 Apr 07 j 08:13	8° <u>♂</u> 52'17	2°05'46				
min. Earth dist.	-836 Apr 08 j 01:56	8° <u>♂</u> 51'05	29.34202 AU	conjunction	-828 Oct 28 j 01:42	27° <u>♂</u> 19'22	1°52'55
direct	-836 Jun 27 j 15:41	7° <u>♂</u> 27'51		minimum elong	-828 Oct 28 j 01:42	27° <u>♂</u> 19'22	1°52'56
max. Earth dist.	-836 Oct 10 j 06:37	9° <u>♂</u> 56'00	31.33948 AU	max. Earth dist.	-828 Oct 27 j 12:35	27° <u>♂</u> 18'08	31.32872 AU
				retrograde	-827 Feb 07 j 16:30	29° <u>♂</u> 46'52	
conjunction	-836 Oct 11 j 00:13	9° <u>♂</u> 57'39	1°57'48	opposition	-827 Apr 27 j 22:19	28° <u>♂</u> 24'40	1°59'56
minimum elong	-836 Oct 11 j 00:13	9° <u>♂</u> 57'39	1°57'48	min. Earth dist.	-827 Apr 28 j 09:58	28° <u>♂</u> 23'53	29.32746 AU
retrograde	-835 Jan 21 j 02:09	12° <u>♂</u> 24'18		direct	-827 Jul 17 j 23:00	27° <u>♂</u> 00'48	
opposition	-835 Apr 09 j 20:19	11° <u>♂</u> 02'17	2°05'50				
min. Earth dist.	-835 Apr 10 j 13:49	11° <u>♂</u> 01'06	29.34008 AU	conjunction	-827 Oct 30 j 10:54	29° <u>♂</u> 29'56	1°51'35
direct	-835 Jun 30 j 03:07	9° <u>♂</u> 37'54		minimum elong	-827 Oct 30 j 10:54	29° <u>♂</u> 29'56	1°51'34
				max. Earth dist.	-827 Oct 29 j 23:21	29° <u>♂</u> 28'50	31.32335 AU
conjunction	-835 Oct 13 j 09:17	12° <u>♂</u> 07'34	1°57'47		-827 Nov 12 j 19:48	0° <u>♂</u>	
minimum elong	-835 Oct 13 j 09:17	12° <u>♂</u> 07'34	1°57'46	retrograde	-826 Feb 10 j 01:48	1° <u>♂</u> 57'32	
max. Earth dist.	-835 Oct 12 j 15:44	12° <u>♂</u> 05'55	31.33807 AU	opposition	-826 Apr 30 j 10:53	0° <u>♂</u> 35'16	1°58'25
retrograde	-834 Jan 23 j 13:37	14° <u>♂</u> 34'18		min. Earth dist.	-826 Apr 30 j 22:39	0° <u>♂</u> 34'28	29.32140 AU
opposition	-834 Apr 12 j 08:15	13° <u>♂</u> 12'14	2°05'43		-826 May 22 j 22:20	30° <u>♂</u>	
min. Earth dist.	-834 Apr 13 j 00:00	13° <u>♂</u> 11'10	29.33907 AU	direct	-826 Jul 20 j 10:47	29° <u>♂</u> 11'26	
direct	-834 Jul 02 j 14:05	11° <u>♂</u> 47'54			-826 Sep 14 j 00:11	0° <u>♂</u>	
conjunction	-834 Oct 15 j 18:34	14° <u>♂</u> 17'30	1°57'35	conjunction	-826 Nov 01 j 19:57	1° <u>♂</u> 40'27	1°50'05
minimum elong	-834 Oct 15 j 18:34	14° <u>♂</u> 17'30	1°57'35	minimum elong	-826 Nov 01 j 19:57	1° <u>♂</u> 40'27	1°50'04
max. Earth dist.	-834 Oct 15 j 02:32	14° <u>♂</u> 16'00	31.33740 AU	max. Earth dist.	-826 Nov 01 j 08:16	1° <u>♂</u> 39'20	31.31695 AU
retrograde	-833 Jan 26 j 00:08	16° <u>♂</u> 44'19		retrograde	-825 Feb 12 j 13:11	4° <u>♂</u> 08'08	
opposition	-833 Apr 14 j 20:16	15° <u>♂</u> 22'14	2°05'26	opposition	-825 May 02 j 23:11	2° <u>♂</u> 45'48	1°56'44
min. Earth dist.	-833 Apr 15 j 12:15	15° <u>♂</u> 21'09	29.33871 AU	min. Earth dist.	-825 May 03 j 09:23	2° <u>♂</u> 45'06	29.31461 AU
direct	-833 Jul 05 j 00:53	13° <u>♂</u> 57'58		direct	-825 Jul 22 j 21:43	1° <u>♂</u> 21'58	
conjunction	-833 Oct 18 j 03:44	16° <u>♂</u> 27'30	1°57'14	conjunction	-825 Nov 04 j 05:01	3° <u>♂</u> 50'53	1°48'25
minimum elong	-833 Oct 18 j 03:44	16° <u>♂</u> 27'30	1°57'13	minimum elong	-825 Nov 04 j 05:01	3° <u>♂</u> 50'53	1°48'24
max. Earth dist.	-833 Oct 17 j 12:10	16° <u>♂</u> 26'03	31.33736 AU	max. Earth dist.	-825 Nov 03 j 18:46	3° <u>♂</u> 49'55	31.30998 AU
retrograde	-832 Jan 28 j 11:33	18° <u>♂</u> 54'25		retrograde	-824 Feb 14 j 23:51	6° <u>♂</u> 18'40	
opposition	-832 Apr 16 j 08:23	17° <u>♂</u> 32'20	2°04'57	opposition	-824 May 04 j 11:51	4° <u>♂</u> 56'14	1°54'53
min. Earth dist.	-832 Apr 16 j 22:33	17° <u>♂</u> 31'23	29.33866 AU	min. Earth dist.	-824 May 04 j 22:07	4° <u>♂</u> 55'32	29.30767 AU
direct	-832 Jul 06 j 12:34	16° <u>♂</u> 08'09		direct	-824 Jul 24 j 08:07	3° <u>♂</u> 32'25	
conjunction	-832 Oct 19 j 12:50	18° <u>♂</u> 37'38	1°56'42	conjunction	-824 Nov 05 j 13:51	6° <u>♂</u> 01'13	1°46'37
minimum elong	-832 Oct 19 j 12:49	18° <u>♂</u> 37'38	1°56'42	minimum elong	-824 Nov 05 j 13:52	6° <u>♂</u> 01'13	1°46'36
max. Earth dist.	-832 Oct 18 j 21:57	18° <u>♂</u> 36'14	31.33726 AU	max. Earth dist.	-824 Nov 05 j 04:29	6° <u>♂</u> 00'20	31.30333 AU
retrograde	-831 Jan 29 j 22:33	21° <u>♂</u> 04'40		retrograde	-823 Feb 16 j 11:09	8° <u>♂</u> 29'07	
opposition	-831 Apr 18 j 20:46	19° <u>♂</u> 42'34	2°04'18	opposition	-823 May 07 j 00:20	7° <u>♂</u> 06'36	1°52'52
min. Earth dist.	-831 Apr 19 j 11:12	19° <u>♂</u> 41'36	29.33846 AU	min. Earth dist.	-823 May 07 j 08:26	7° <u>♂</u> 06'04	29.30127 AU
direct	-831 Jul 09 j 00:00	18° <u>♂</u> 18'29		direct	-823 Jul 26 j 19:29	5° <u>♂</u> 42'49	
conjunction	-831 Oct 21 j 22:04	20° <u>♂</u> 47'54	1°56'00	conjunction	-823 Nov 07 j 22:47	8° <u>♂</u> 11'31	1°44'39
minimum elong	-831 Oct 21 j 22:04	20° <u>♂</u> 47'54	1°56'00	minimum elong	-823 Nov 07 j 22:48	8° <u>♂</u> 11'31	1°44'39
max. Earth dist.	-831 Oct 21 j 08:19	20° <u>♂</u> 46'36	31.33682 AU	max. Earth dist.	-823 Nov 07 j 14:14	8° <u>♂</u> 10'43	31.29733 AU
retrograde	-830 Feb 01 j 09:25	23° <u>♂</u> 15'02		retrograde	-822 Feb 18 j 22:43	10° <u>♂</u> 39'33	
opposition	-830 Apr 21 j 08:55	21° <u>♂</u> 52'57	2°03'28	opposition	-822 May 09 j 12:48	9° <u>♂</u> 16'58	1°50'41
min. Earth dist.	-830 Apr 21 j 22:11	21° <u>♂</u> 52'03	29.33753 AU	min. Earth dist.	-822 May 09 j 20:45	9° <u>♂</u> 16'26	29.29580 AU
direct	-830 Jul 11 j 13:19	20° <u>♂</u> 28'55		direct	-822 Jul 29 j 06:56	7° <u>♂</u> 53'13	
conjunction	-830 Oct 24 j 07:15	22° <u>♂</u> 58'18	1°55'08	conjunction	-822 Nov 10 j 07:47	10° <u>♂</u> 21'52	1°42'33
minimum elong	-830 Oct 24 j 07:15	22° <u>♂</u> 58'18	1°55'08	minimum elong	-822 Nov 10 j 07:47	10° <u>♂</u> 21'52	1°42'33
max. Earth dist.	-830 Oct 23 j 17:17	22° <u>♂</u> 56'59	31.33540 AU	max. Earth dist.	-822 Nov 10 j 00:53	10° <u>♂</u> 21'13	31.29241 AU
retrograde	-829 Feb 03 j 20:35	25° <u>♂</u> 25'34		retrograde	-821 Feb 21 j 10:26	12° <u>♂</u> 50'00	

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 6

Attention, astronomical year style is used: The year -821 in astronomical counting style is the year 822 BCE in historical counting style.

opposition	-821 May 12 j 01:20	11°M27'23	1°48'21	max. Earth dist.	-814 Nov 27 j 07:12	27°M48'34	31.24707 AU
min. Earth dist.	-821 May 12 j 07:31	11°M26'58	29.29116 AU		-813 Feb 06 j 01:22	0°Z	
direct	-821 Jul 31 j 20:01	10°M03'42		retrograde	-813 Mar 11 j 04:13	0°Z18'02	
					-813 Apr 14 j 05:46	30°RM	
conjunction	-821 Nov 12 j 16:34	12°M32'17	1°40'17	opposition	-813 May 30 j 08:15	28°M55'01	1°24'18
minimum elong	-821 Nov 12 j 16:34	12°M32'17	1°40'16	min. Earth dist.	-813 May 30 j 09:01	28°M54'58	29.24254 AU
max. Earth dist.	-821 Nov 12 j 09:56	12°M31'39	31.28820 AU	direct	-813 Aug 18 j 13:22	27°M31'43	
	-820 Feb 17 j 23:55	15°M					
retrograde	-820 Feb 23 j 21:51	15°M00'34		conjunction	-813 Nov 29 j 17:43	29°M59'45	1°17'14
	-820 Feb 29 j 18:01	15°RM		minimum elong	-813 Nov 29 j 17:43	29°M59'45	1°17'13
opposition	-820 May 13 j 14:02	13°M37'55	1°45'52		-813 Nov 29 j 20:17	0°Z	
min. Earth dist.	-820 May 13 j 19:33	13°M37'33	29.28726 AU	max. Earth dist.	-813 Nov 29 j 17:58	29°M59'47	31.23673 AU
direct	-820 Aug 02 j 06:13	12°M14'19		retrograde	-812 Mar 12 j 16:08	2°Z29'12	
				opposition	-812 May 31 j 21:13	1°Z06'05	1°20'42
conjunction	-820 Nov 14 j 01:36	14°M42'50	1°37'52	min. Earth dist.	-812 May 31 j 20:24	1°Z06'09	29.23184 AU
minimum elong	-820 Nov 14 j 01:36	14°M42'50	1°37'52		-812 Jul 17 j 22:08	30°RM	
max. Earth dist.	-820 Nov 13 j 20:59	14°M42'24	31.28451 AU	direct	-812 Aug 20 j 02:21	29°M42'48	
	-820 Nov 21 j 15:33	15°M			-812 Sep 21 j 08:26	0°Z	
retrograde	-819 Feb 25 j 07:22	17°M11'17					
opposition	-819 May 16 j 02:45	15°M48'36	1°43'13	conjunction	-812 Dec 01 j 02:49	2°Z10'45	1°13'49
min. Earth dist.	-819 May 16 j 07:17	15°M48'18	29.28351 AU	minimum elong	-812 Dec 01 j 02:50	2°Z10'45	1°13'49
	-819 Jun 17 j 03:46	15°RM		max. Earth dist.	-812 Dec 01 j 03:10	2°Z10'47	31.22607 AU
direct	-819 Aug 04 j 19:13	14°M25'04		retrograde	-811 Mar 15 j 04:10	4°Z40'20	
	-819 Sep 20 j 07:25	15°M		opposition	-811 Jun 03 j 10:09	3°Z17'07	1°16'59
				min. Earth dist.	-811 Jun 03 j 08:44	3°Z17'13	29.22140 AU
conjunction	-819 Nov 16 j 10:30	16°M53'32	1°35'19	direct	-811 Aug 22 j 12:39	1°Z53'50	
minimum elong	-819 Nov 16 j 10:30	16°M53'32	1°35'18				
max. Earth dist.	-819 Nov 16 j 05:41	16°M53'05	31.28080 AU	conjunction	-811 Dec 03 j 12:03	4°Z21'43	1°10'17
retrograde	-818 Feb 27 j 19:31	19°M22'08		minimum elong	-811 Dec 03 j 12:04	4°Z21'43	1°10'16
opposition	-818 May 18 j 15:29	17°M59'26	1°40'24	max. Earth dist.	-811 Dec 03 j 14:29	4°Z21'57	31.21586 AU
min. Earth dist.	-818 May 18 j 18:51	17°M59'13	29.27957 AU	retrograde	-810 Mar 17 j 14:24	6°Z51'27	
direct	-818 Aug 07 j 05:57	16°M35'59		opposition	-810 Jun 05 j 23:03	5°Z28'09	1°13'09
				min. Earth dist.	-810 Jun 05 j 20:25	5°Z28'19	29.21146 AU
conjunction	-818 Nov 18 j 19:39	19°M04'24	1°32'37	direct	-810 Aug 25 j 01:58	4°Z04'53	
minimum elong	-818 Nov 18 j 19:39	19°M04'24	1°32'37				
max. Earth dist.	-818 Nov 18 j 16:31	19°M04'06	31.27646 AU	conjunction	-810 Dec 05 j 21:08	6°Z32'44	1°06'39
retrograde	-817 Mar 02 j 05:21	21°M33'09		minimum elong	-810 Dec 05 j 21:08	6°Z32'44	1°06'38
opposition	-817 May 21 j 04:21	20°M10'25	1°37'27	max. Earth dist.	-810 Dec 05 j 23:36	6°Z32'58	31.20644 AU
min. Earth dist.	-817 May 21 j 07:45	20°M10'12	29.27472 AU	retrograde	-809 Mar 20 j 03:11	9°Z02'37	
direct	-817 Aug 09 j 17:45	18°M47'02		opposition	-809 Jun 08 j 11:55	7°Z39'15	1°09'13
				min. Earth dist.	-809 Jun 08 j 07:47	7°Z39'32	29.20248 AU
conjunction	-817 Nov 21 j 04:47	21°M15'23	1°29'48	direct	-809 Aug 27 j 12:58	6°Z16'02	
minimum elong	-817 Nov 21 j 04:48	21°M15'23	1°29'47				
max. Earth dist.	-817 Nov 21 j 01:40	21°M15'05	31.27123 AU	conjunction	-809 Dec 08 j 06:27	8°Z43'51	1°02'55
retrograde	-816 Mar 03 j 17:00	23°M44'18		minimum elong	-809 Dec 08 j 06:27	8°Z43'51	1°02'54
opposition	-816 May 22 j 17:17	22°M21'31	1°34'22	max. Earth dist.	-809 Dec 08 j 10:53	8°Z44'16	31.19789 AU
min. Earth dist.	-816 May 22 j 19:06	22°M21'24	29.26882 AU	retrograde	-808 Mar 21 j 13:25	11°Z13'55	
direct	-816 Aug 11 j 04:24	20°M58'11		opposition	-808 Jun 10 j 00:58	9°Z50'31	1°05'10
				min. Earth dist.	-808 Jun 09 j 20:23	9°Z50'49	29.19429 AU
conjunction	-816 Nov 22 j 13:59	23°M26'28	1°26'50	direct	-808 Aug 29 j 00:38	8°Z27'22	
minimum elong	-816 Nov 22 j 13:59	23°M26'28	1°26'50				
max. Earth dist.	-816 Nov 22 j 11:53	23°M26'16	31.26459 AU	conjunction	-808 Dec 09 j 15:37	10°Z55'08	0°59'05
retrograde	-815 Mar 06 j 04:00	25°M55'32		minimum elong	-808 Dec 09 j 15:37	10°Z55'08	0°59'05
opposition	-815 May 25 j 06:24	24°M32'41	1°31'08	max. Earth dist.	-808 Dec 09 j 20:35	10°Z55'36	31.19017 AU
min. Earth dist.	-815 May 25 j 08:37	24°M32'32	29.26144 AU	retrograde	-807 Mar 24 j 01:11	13°Z25'23	
direct	-815 Aug 13 j 14:37	23°M09'23		opposition	-807 Jun 12 j 13:54	12°Z01'58	1°01'01
				min. Earth dist.	-807 Jun 12 j 07:28	12°Z02'24	29.18672 AU
conjunction	-815 Nov 24 j 23:19	25°M37'35	1°23'45	direct	-807 Aug 31 j 11:07	10°Z38'52	
minimum elong	-815 Nov 24 j 23:19	25°M37'35	1°23'44				
max. Earth dist.	-815 Nov 24 j 21:44	25°M37'26	31.25657 AU	conjunction	-807 Dec 12 j 01:04	13°Z06'38	0°55'10
retrograde	-814 Mar 08 j 15:56	28°M06'47		minimum elong	-807 Dec 12 j 01:04	13°Z06'38	0°55'09
opposition	-814 May 27 j 19:10	26°M43'52	1°27'47	max. Earth dist.	-807 Dec 12 j 07:11	13°Z07'13	31.18268 AU
min. Earth dist.	-814 May 27 j 19:43	26°M43'50	29.25257 AU	retrograde	-806 Mar 26 j 12:25	15°Z37'05	
direct	-814 Aug 16 j 02:09	25°M20'34		opposition	-806 Jun 15 j 02:51	14°Z13'37	0°56'47
				min. Earth dist.	-806 Jun 14 j 20:38	14°Z14'03	29.17924 AU
conjunction	-814 Nov 27 j 08:34	27°M48'42	1°20'33	direct	-806 Sep 02 j 20:34	12°Z50'36	
minimum elong	-814 Nov 27 j 08:34	27°M48'42	1°20'33				

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Attention, astronomical year style is used: The year -806 in astronomical counting style is the year 807 BCE in historical counting style.

conjunction	-806 Dec 14 j 10:33	15° $\overline{21}$ 18'21	0°51'09	conjunction	-798 Dec 31 j 16:50	2° $\overline{35}$ 55'07	0°16'54
minimum elong	-806 Dec 14 j 10:33	15° $\overline{21}$ 18'21	0°51'09	minimum elong	-798 Dec 31 j 16:51	2° $\overline{35}$ 55'07	0°16'54
max. Earth dist.	-806 Dec 14 j 17:36	15° $\overline{21}$ 19'01	31.17520 AU	max. Earth dist.	-797 Jan 01 j 05:31	2° $\overline{35}$ 56'19	31.08433 AU
retrograde	-805 Mar 29 j 01:00	17° $\overline{21}$ 48'59		retrograde	-797 Apr 16 j 03:25	5° $\overline{32}$ 26'55	
opposition	-805 Jun 17 j 15:52	16° $\overline{21}$ 25'30	0°52'28	min. Earth dist.	-797 Jul 05 j 11:51	4° $\overline{30}$ 03'35	29.07877 AU
min. Earth dist.	-805 Jun 17 j 07:48	16° $\overline{21}$ 26'03	29.17144 AU	opposition	-797 Jul 06 j 00:39	4° $\overline{30}$ 02'42	0°15'37
direct	-805 Sep 05 j 07:37	15° $\overline{21}$ 02'32		direct	-797 Sep 23 j 03:56	2° $\overline{33}$ 39'41	
conjunction	-805 Dec 16 j 19:59	17° $\overline{21}$ 30'16	0°47'04	conjunction	-796 Jan 03 j 02:44	5° $\overline{30}$ 07'06	0°12'27
minimum elong	-805 Dec 16 j 20:00	17° $\overline{21}$ 30'16	0°47'03	minimum elong	-796 Jan 03 j 02:44	5° $\overline{30}$ 07'06	0°12'26
max. Earth dist.	-805 Dec 17 j 03:17	17° $\overline{21}$ 30'57	31.16705 AU	behind sun begin	-796 Jan 02 j 22:28	5° $\overline{30}$ 06'43	
retrograde	-804 Mar 30 j 14:10	20° $\overline{21}$ 01'07		behind sun end	-796 Jan 03 j 06:59	5° $\overline{30}$ 07'29	
opposition	-804 Jun 19 j 05:09	18° $\overline{21}$ 37'35	0°48'03	max. Earth dist.	-796 Jan 03 j 16:41	5° $\overline{30}$ 08'25	31.07328 AU
min. Earth dist.	-804 Jun 18 j 21:21	18° $\overline{21}$ 38'06	29.16291 AU	retrograde	-796 Apr 17 j 15:34	7° $\overline{33}$ 39'03	
direct	-804 Sep 06 j 17:58	17° $\overline{21}$ 14'39		opposition	-796 Jul 07 j 13:35	6° $\overline{33}$ 14'47	0°10'50
conjunction	-804 Dec 18 j 05:49	19° $\overline{21}$ 42'23	0°42'55	min. Earth dist.	-796 Jul 06 j 22:41	6° $\overline{33}$ 15'48	29.06825 AU
minimum elong	-804 Dec 18 j 05:49	19° $\overline{21}$ 42'23	0°42'55	direct	-796 Sep 24 j 15:18	4° $\overline{33}$ 51'45	
max. Earth dist.	-804 Dec 18 j 14:32	19° $\overline{21}$ 43'12	31.15801 AU	conjunction	-795 Jan 04 j 12:44	7° $\overline{33}$ 19'11	0°07'59
retrograde	-803 Apr 02 j 03:04	22° $\overline{21}$ 13'23		minimum elong	-795 Jan 04 j 12:44	7° $\overline{33}$ 19'11	0°07'59
opposition	-803 Jun 21 j 18:11	20° $\overline{21}$ 49'48	0°43'34	behind sun begin	-795 Jan 04 j 06:59	7° $\overline{33}$ 18'39	
min. Earth dist.	-803 Jun 21 j 09:09	20° $\overline{21}$ 50'24	29.15317 AU	behind sun end	-795 Jan 04 j 18:30	7° $\overline{33}$ 19'42	
direct	-803 Sep 09 j 05:45	19° $\overline{21}$ 26'53		max. Earth dist.	-795 Jan 05 j 03:02	7° $\overline{33}$ 20'31	31.06328 AU
conjunction	-803 Dec 20 j 15:33	21° $\overline{21}$ 54'35	0°38'42	retrograde	-795 Apr 20 j 04:08	9° $\overline{33}$ 51'18	
minimum elong	-803 Dec 20 j 15:34	21° $\overline{21}$ 54'35	0°38'41	min. Earth dist.	-795 Jul 09 j 11:39	8° $\overline{33}$ 27'59	29.05885 AU
max. Earth dist.	-803 Dec 20 j 23:48	21° $\overline{21}$ 55'22	31.14761 AU	opposition	-795 Jul 10 j 02:30	8° $\overline{33}$ 26'58	0°06'02
retrograde	-802 Apr 04 j 16:07	24° $\overline{21}$ 25'45		direct	-795 Sep 27 j 00:47	7° $\overline{33}$ 03'59	
opposition	-802 Jun 24 j 07:24	23° $\overline{21}$ 02'05	0°39'02	conjunction	-794 Jan 06 j 22:57	9° $\overline{33}$ 31'25	0°03'30
min. Earth dist.	-802 Jun 23 j 22:17	23° $\overline{21}$ 02'42	29.14209 AU	minimum elong	-794 Jan 06 j 22:58	9° $\overline{33}$ 31'25	0°03'29
direct	-802 Sep 11 j 16:00	21° $\overline{21}$ 39'10		behind sun begin	-794 Jan 06 j 16:36	9° $\overline{33}$ 30'50	
conjunction	-802 Dec 23 j 01:26	24° $\overline{21}$ 06'50	0°34'25	behind sun end	-794 Jan 07 j 05:20	9° $\overline{33}$ 32'00	
minimum elong	-802 Dec 23 j 01:26	24° $\overline{21}$ 06'50	0°34'25	max. Earth dist.	-794 Jan 07 j 15:02	9° $\overline{33}$ 32'56	31.05433 AU
max. Earth dist.	-802 Dec 23 j 11:15	24° $\overline{21}$ 07'46	31.13581 AU	retrograde	-794 Apr 22 j 16:47	12° $\overline{33}$ 03'42	
retrograde	-801 Apr 07 j 04:02	26° $\overline{21}$ 38'08		opposition	-794 Jul 12 j 15:22	10° $\overline{33}$ 39'21	0°01'12
opposition	-801 Jun 26 j 20:33	25° $\overline{21}$ 14'22	0°34'26	min. Earth dist.	-794 Jul 11 j 23:01	10° $\overline{33}$ 40'28	29.05016 AU
min. Earth dist.	-801 Jun 26 j 10:43	25° $\overline{21}$ 15'01	29.12960 AU	direct	-794 Sep 29 j 11:52	9° $\overline{33}$ 16'23	
direct	-801 Sep 14 j 05:51	23° $\overline{21}$ 51'26		desc. node	-794 Oct 12 j 10:11	9° $\overline{33}$ 19'15	
conjunction	-801 Dec 25 j 11:13	26° $\overline{21}$ 19'02	0°30'06	conjunction	-793 Jan 09 j 09:02	11° $\overline{33}$ 43'52	0°-1'-7
minimum elong	-801 Dec 25 j 11:13	26° $\overline{21}$ 19'02	0°30'05	minimum elong	-793 Jan 09 j 09:01	11° $\overline{33}$ 43'52	0°01'08
max. Earth dist.	-801 Dec 25 j 20:41	26° $\overline{21}$ 19'56	31.12300 AU	behind sun begin	-793 Jan 09 j 02:37	11° $\overline{33}$ 43'17	
retrograde	-800 Apr 08 j 17:58	28° $\overline{21}$ 50'27		behind sun end	-793 Jan 09 j 15:26	11° $\overline{33}$ 44'26	
opposition	-800 Jun 28 j 09:40	27° $\overline{21}$ 26'34	0°29'47	max. Earth dist.	-793 Jan 10 j 00:56	11° $\overline{33}$ 45'22	31.04591 AU
min. Earth dist.	-800 Jun 27 j 22:49	27° $\overline{21}$ 27'18	29.11649 AU	retrograde	-793 Apr 25 j 06:44	14° $\overline{33}$ 16'21	
direct	-800 Sep 15 j 17:34	26° $\overline{21}$ 03'36		min. Earth dist.	-793 Jul 14 j 11:51	12° $\overline{33}$ 53'05	29.04197 AU
conjunction	-800 Dec 26 j 21:04	28° $\overline{21}$ 31'09	0°25'44	opposition	-793 Jul 15 j 04:26	12° $\overline{33}$ 51'57	0°-3'-37
minimum elong	-800 Dec 26 j 21:04	28° $\overline{21}$ 31'09	0°25'43	direct	-793 Oct 01 j 21:29	11° $\overline{33}$ 29'03	
max. Earth dist.	-800 Dec 27 j 08:10	28° $\overline{21}$ 32'11	31.10968 AU	conjunction	-792 Jan 11 j 19:31	13° $\overline{33}$ 56'33	0°-5'-40
retrograde	-799 Feb 06 j 14:10	0° $\overline{33}$		minimum elong	-792 Jan 11 j 19:31	13° $\overline{33}$ 56'33	0°05'42
opposition	-799 Apr 11 j 04:12	1° $\overline{33}$ 02'41		behind sun begin	-792 Jan 11 j 13:21	13° $\overline{33}$ 56'00	
min. Earth dist.	-799 Jun 17 j 17:02	30° \overline{R} $\overline{21}$		behind sun end	-792 Jan 12 j 01:41	13° $\overline{33}$ 57'07	
direct	-799 Jun 30 j 22:46	29° $\overline{21}$ 38'40	0°25'06	max. Earth dist.	-792 Jan 12 j 13:10	13° $\overline{33}$ 58'13	31.03769 AU
conjunction	-799 Jun 30 j 11:44	29° $\overline{21}$ 39'25	29.10317 AU	retrograde	-792 Apr 26 j 19:57	16° $\overline{33}$ 29'13	
opposition	-799 Sep 18 j 05:46	28° $\overline{21}$ 15'40		opposition	-792 Jul 16 j 17:24	15° $\overline{33}$ 04'48	0°-8'-26
minimum elong	-799 Dec 10 j 01:30	0° $\overline{33}$		min. Earth dist.	-792 Jul 16 j 00:11	15° $\overline{33}$ 05'59	29.03364 AU
max. Earth dist.	-799 Dec 29 j 06:56	0° $\overline{33}$ 43'09	0°21'20	direct	-792 Oct 03 j 10:11	13° $\overline{33}$ 41'56	
retrograde	-799 Dec 29 j 06:56	0° $\overline{33}$ 43'09	0°21'19	conjunction	-791 Jan 13 j 06:02	16° $\overline{33}$ 09'29	0°-10'-9
opposition	-799 Dec 29 j 18:29	0° $\overline{33}$ 44'15	31.09664 AU	minimum elong	-791 Jan 13 j 06:02	16° $\overline{33}$ 09'29	0°10'11
min. Earth dist.	-798 Apr 13 j 16:04	3° $\overline{33}$ 14'48		behind sun begin	-791 Jan 13 j 00:52	16° $\overline{33}$ 09'01	
direct	-798 Jul 03 j 11:34	1° $\overline{33}$ 50'42	0°20'23	behind sun end	-791 Jan 13 j 11:11	16° $\overline{33}$ 09'57	
conjunction	-798 Jul 02 j 22:47	1° $\overline{33}$ 51'34	29.09048 AU	max. Earth dist.	-791 Jan 13 j 23:10	16° $\overline{33}$ 11'06	31.02920 AU
opposition	-798 Sep 20 j 17:24	0° $\overline{33}$ 27'40		retrograde	-791 Apr 29 j 11:06	18° $\overline{33}$ 42'19	
minimum elong	-798 Sep 20 j 17:24	0° $\overline{33}$ 27'40		opposition	-791 Jul 19 j 06:25	17° $\overline{33}$ 17'53	0°-13'-16
max. Earth dist.	-798 Sep 20 j 17:24	0° $\overline{33}$ 27'40		min. Earth dist.	-791 Jul 18 j 12:31	17° $\overline{33}$ 19'06	29.02484 AU

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 8

Attention, astronomical year style is used: The year -791 in astronomical counting style is the year 792 BCE in historical counting style.

direct	-791 Oct 05 j 21:15	15° $\overline{35}$ 5'02		opposition	-783 Aug 06 j 13:08	5° \approx 04'58	0°-50'-34
				min. Earth dist.	-783 Aug 05 j 15:39	5° \approx 06'27	28.93995 AU
conjunction	-790 Jan 15 j 16:50	18° $\overline{32}$ 2'38	0°-14'-39	direct	-783 Oct 23 j 15:09	3° \approx 41'57	
minimum elong	-790 Jan 15 j 16:50	18° $\overline{32}$ 2'38	0°14'41				
behind sun begin	-790 Jan 15 j 14:02	18° $\overline{32}$ 2'23		conjunction	-782 Feb 02 j 08:53	6° \approx 09'40	0°-49'-20
behind sun end	-790 Jan 15 j 19:38	18° $\overline{32}$ 2'53		minimum elong	-782 Feb 02 j 08:53	6° \approx 09'40	0°49'22
max. Earth dist.	-790 Jan 16 j 11:02	18° $\overline{32}$ 4'21	31.01978 AU	max. Earth dist.	-782 Feb 03 j 06:49	6° \approx 11'45	30.93583 AU
retrograde	-790 May 01 j 22:43	20° $\overline{35}$ 5'38		retrograde	-782 May 20 j 06:16	8° \approx 43'37	
opposition	-790 Jul 21 j 19:21	19° $\overline{31}$ 0'09	0°-18'-4	min. Earth dist.	-782 Aug 08 j 03:29	7° \approx 20'08	28.93289 AU
min. Earth dist.	-790 Jul 21 j 01:46	19° $\overline{32}$ 2'21	29.01492 AU	opposition	-782 Aug 09 j 01:44	7° \approx 18'36	0°-54'-59
direct	-790 Oct 08 j 09:05	18° $\overline{30}$ 8'19		direct	-782 Oct 26 j 01:31	5° \approx 55'35	
conjunction	-789 Jan 18 j 03:41	20° $\overline{35}$ 5'56	0°-19'-7	conjunction	-781 Feb 04 j 20:21	8° \approx 23'21	0°-53'-26
minimum elong	-789 Jan 18 j 03:41	20° $\overline{35}$ 5'56	0°19'08	minimum elong	-781 Feb 04 j 20:21	8° \approx 23'21	0°53'27
max. Earth dist.	-789 Jan 18 j 21:48	20° $\overline{37}$ 3'39	31.00942 AU	max. Earth dist.	-781 Feb 05 j 19:36	8° \approx 25'33	30.92913 AU
retrograde	-789 May 04 j 12:23	23° $\overline{30}$ 9'04		retrograde	-781 May 22 j 18:57	10° \approx 57'26	
opposition	-789 Jul 24 j 08:22	21° $\overline{34}$ 4'32	0°-22'-50	opposition	-781 Aug 11 j 14:29	9° \approx 32'23	0°-59'-19
min. Earth dist.	-789 Jul 23 j 13:38	21° $\overline{34}$ 5'49	29.00401 AU	min. Earth dist.	-781 Aug 10 j 16:20	9° \approx 33'55	28.92662 AU
direct	-789 Oct 10 j 21:14	20° $\overline{32}$ 1'41		direct	-781 Oct 28 j 13:03	8° \approx 09'24	
conjunction	-788 Jan 20 j 14:29	22° $\overline{34}$ 9'18	0°-23'-34	conjunction	-780 Feb 07 j 07:52	10° \approx 37'14	0°-57'-26
minimum elong	-788 Jan 20 j 14:29	22° $\overline{34}$ 9'18	0°23'36	minimum elong	-780 Feb 07 j 07:51	10° \approx 37'14	0°57'28
max. Earth dist.	-788 Jan 21 j 09:03	22° $\overline{35}$ 1'04	30.99794 AU	max. Earth dist.	-780 Feb 08 j 07:10	10° \approx 39'26	30.92322 AU
retrograde	-788 May 06 j 00:52	25° $\overline{32}$ 2'34		retrograde	-780 May 24 j 10:22	13° \approx 11'25	
opposition	-788 Jul 25 j 21:27	23° $\overline{35}$ 7'57	0°-27'-35	min. Earth dist.	-780 Aug 12 j 04:01	11° \approx 47'58	28.92085 AU
min. Earth dist.	-788 Jul 25 j 03:23	23° $\overline{35}$ 9'11	28.99220 AU	opposition	-780 Aug 13 j 03:08	11° \approx 46'22	-1°-3'-33
direct	-788 Oct 12 j 08:25	22° $\overline{33}$ 5'04		direct	-780 Oct 30 j 01:27	10° \approx 23'24	
conjunction	-787 Jan 22 j 01:29	25° $\overline{30}$ 2'41	0°-27'-59	conjunction	-779 Feb 08 j 19:41	12° \approx 51'18	-1°-1'-22
minimum elong	-787 Jan 22 j 01:29	25° $\overline{30}$ 2'41	0°28'00	minimum elong	-779 Feb 08 j 19:41	12° \approx 51'18	1°01'23
max. Earth dist.	-787 Jan 22 j 20:49	25° $\overline{30}$ 4'31	30.98598 AU	max. Earth dist.	-779 Feb 09 j 19:16	12° \approx 53'32	30.91727 AU
retrograde	-787 May 08 j 12:45	27° $\overline{33}$ 6'03			-779 Apr 16 j 21:33	15° \approx	
opposition	-787 Jul 28 j 10:06	26° $\overline{31}$ 1'21	0°-32'-17	retrograde	-779 May 26 j 23:36	15° \approx 25'37	
min. Earth dist.	-787 Jul 27 j 14:35	26° $\overline{31}$ 2'41	28.98015 AU		-779 Jul 06 j 22:11	15° \approx	
direct	-787 Oct 14 j 20:21	24° $\overline{34}$ 8'25		opposition	-779 Aug 15 j 15:46	14° \approx 00'33	-1°-7'-43
				min. Earth dist.	-779 Aug 14 j 17:38	14° \approx 02'05	28.91486 AU
conjunction	-786 Jan 24 j 12:24	27° $\overline{31}$ 6'02	0°-32'-21	direct	-779 Nov 01 j 12:41	12° \approx 37'35	
minimum elong	-786 Jan 24 j 12:24	27° $\overline{31}$ 6'02	0°32'23		-778 Feb 08 j 21:02	15° \approx	
max. Earth dist.	-786 Jan 25 j 07:37	27° $\overline{31}$ 7'51	30.97394 AU				
retrograde	-786 May 11 j 00:35	29° $\overline{34}$ 9'31		conjunction	-778 Feb 11 j 07:43	15° \approx 05'34	-1°-5'-12
opposition	-786 Jul 30 j 23:00	28° $\overline{32}$ 4'43	0°-36'-57	minimum elong	-778 Feb 11 j 07:43	15° \approx 05'34	1°05'14
min. Earth dist.	-786 Jul 30 j 03:51	28° $\overline{32}$ 6'02	28.96849 AU	max. Earth dist.	-778 Feb 12 j 07:37	15° \approx 07'49	30.91100 AU
direct	-786 Oct 17 j 06:08	27° $\overline{30}$ 1'45		retrograde	-778 May 29 j 12:50	17° \approx 39'59	
				min. Earth dist.	-778 Aug 17 j 05:15	16° \approx 16'31	28.90818 AU
conjunction	-785 Jan 26 j 23:22	29° $\overline{32}$ 9'22	0°-36'-41	opposition	-778 Aug 18 j 04:23	16° \approx 14'54	-1°-11'-46
minimum elong	-785 Jan 26 j 23:21	29° $\overline{32}$ 9'22	0°36'42		-778 Oct 13 j 03:22	15° \approx	
max. Earth dist.	-785 Jan 27 j 20:15	29° $\overline{33}$ 1'21	30.96263 AU	direct	-778 Nov 04 j 00:49	14° \approx 51'56	
	-785 Feb 09 j 12:23	0° \approx			-778 Nov 25 j 11:37	15° \approx	
retrograde	-785 May 13 j 12:42	2° \approx 02'58					
opposition	-785 Aug 02 j 11:44	0° \approx 38'05	0°-41'-33	conjunction	-777 Feb 13 j 19:39	17° \approx 19'57	-1°-8'-57
min. Earth dist.	-785 Aug 01 j 15:07	0° \approx 39'30	28.95769 AU	minimum elong	-777 Feb 13 j 19:38	17° \approx 19'57	1°08'57
	-785 Aug 26 j 09:50	30° \approx $\overline{3}$		max. Earth dist.	-777 Feb 14 j 18:49	17° \approx 22'09	30.90373 AU
direct	-785 Oct 19 j 17:06	29° $\overline{31}$ 5'05		retrograde	-777 Jun 01 j 01:38	19° \approx 54'29	
	-785 Dec 10 j 14:53	0° \approx		opposition	-777 Aug 20 j 17:13	18° \approx 29'22	-1°-15'-43
				min. Earth dist.	-777 Aug 19 j 19:06	18° \approx 30'54	28.90048 AU
conjunction	-784 Jan 29 j 10:23	1° \approx 42'43	0°-40'-58	direct	-777 Nov 06 j 11:08	17° \approx 06'23	
minimum elong	-784 Jan 29 j 10:23	1° \approx 42'43	0°41'00				
max. Earth dist.	-784 Jan 30 j 06:59	1° \approx 44'40	30.95242 AU	conjunction	-776 Feb 16 j 07:59	19° \approx 34'26	-1°-12'-35
retrograde	-784 May 15 j 02:32	4° \approx 16'26		minimum elong	-776 Feb 16 j 07:58	19° \approx 34'26	1°12'37
min. Earth dist.	-784 Aug 03 j 03:45	2° \approx 52'55	28.94825 AU	max. Earth dist.	-776 Feb 17 j 07:59	19° \approx 36'43	30.89548 AU
opposition	-784 Aug 04 j 00:28	2° \approx 51'29	0°-46'-6	retrograde	-776 Jun 02 j 14:23	22° \approx 09'02	
direct	-784 Oct 21 j 02:57	1° \approx 28'28		min. Earth dist.	-776 Aug 21 j 06:56	20° \approx 45'27	28.89173 AU
				opposition	-776 Aug 22 j 05:42	20° \approx 43'52	-1°-19'-33
conjunction	-783 Jan 30 j 21:40	3° \approx 56'08	0°-45'-11	direct	-776 Nov 07 j 22:49	19° \approx 20'49	
minimum elong	-783 Jan 30 j 21:40	3° \approx 56'08	0°45'12				
max. Earth dist.	-783 Jan 31 j 20:00	3° \approx 58'15	30.94351 AU	conjunction	-775 Feb 17 j 20:11	21° \approx 48'55	-1°-16'-7
retrograde	-783 May 17 j 15:32	6° \approx 29'58		minimum elong	-775 Feb 17 j 20:11	21° \approx 48'55	1°16'08

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 9

Attention, astronomical year style is used: The year -775 in astronomical counting style is the year 776 BCE in historical counting style.

max. Earth dist.	-775 Feb 18 j 19:07	21° \approx 51'05	30.88634 AU	max. Earth dist.	-767 Mar 09 j 01:56	9° \approx 48'06	30.83508 AU
retrograde	-775 Jun 05 j 03:38	24° \approx 23'34		retrograde	-767 Jun 23 j 16:42	12° \approx 20'49	
opposition	-775 Aug 24 j 18:18	22° \approx 58'21	-1°-23'-15	opposition	-767 Sep 11 j 19:57	10° \approx 55'27	-1°-48'00
min. Earth dist.	-775 Aug 23 j 20:10	22° \approx 59'53	28.88242 AU	min. Earth dist.	-767 Sep 10 j 20:53	10° \approx 57'04	28.83479 AU
direct	-775 Nov 10 j 09:10	21° \approx 35'15		direct	-767 Nov 28 j 05:58	9° \approx 32'10	
conjunction	-774 Feb 20 j 08:32	24° \approx 03'23	-1°-19'-31	conjunction	-766 Mar 10 j 13:53	12° \approx 00'56	-1°-42'-7
minimum elong	-774 Feb 20 j 08:32	24° \approx 03'23	1°19'34	minimum elong	-766 Mar 10 j 13:52	12° \approx 00'56	1°42'09
max. Earth dist.	-774 Feb 21 j 08:38	24° \approx 05'39	30.87681 AU	max. Earth dist.	-766 Mar 11 j 13:39	12° \approx 03'11	30.83210 AU
retrograde	-774 Jun 07 j 15:45	26° \approx 38'04		retrograde	-766 Jun 26 j 05:24	14° \approx 36'05	
min. Earth dist.	-774 Aug 26 j 08:16	25° \approx 14'20	28.87297 AU	min. Earth dist.	-766 Sep 13 j 10:03	13° \approx 12'16	28.83175 AU
opposition	-774 Aug 27 j 06:38	25° \approx 12'47	-1°-26'-51	opposition	-766 Sep 14 j 08:08	13° \approx 10'44	-1°-50'-24
direct	-774 Nov 12 j 21:19	23° \approx 49'37		direct	-766 Nov 30 j 16:15	11° \approx 47'26	
conjunction	-773 Feb 22 j 20:48	26° \approx 17'48	-1°-22'-49	conjunction	-765 Mar 13 j 03:18	14° \approx 16'17	-1°-44'-17
minimum elong	-773 Feb 22 j 20:48	26° \approx 17'48	1°22'50	minimum elong	-765 Mar 13 j 03:18	14° \approx 16'17	1°44'18
max. Earth dist.	-773 Feb 23 j 20:05	26° \approx 20'00	30.86765 AU	max. Earth dist.	-765 Mar 14 j 03:44	14° \approx 18'36	30.82867 AU
retrograde	-773 Jun 10 j 06:09	28° \approx 52'33		retrograde	-765 Jun 28 j 17:18	16° \approx 51'28	
opposition	-773 Aug 29 j 18:59	27° \approx 27'12	-1°-30'-18	opposition	-765 Sep 16 j 20:12	15° \approx 26'06	-1°-52'-38
min. Earth dist.	-773 Aug 28 j 20:16	27° \approx 28'46	28.86429 AU	min. Earth dist.	-765 Sep 15 j 22:23	15° \approx 27'38	28.82792 AU
direct	-773 Nov 15 j 07:40	26° \approx 03'58		direct	-765 Dec 03 j 03:52	14° \approx 02'47	
conjunction	-772 Feb 25 j 09:14	28° \approx 32'13	-1°-25'-59	conjunction	-764 Mar 14 j 16:40	16° \approx 31'43	-1°-46'-18
minimum elong	-772 Feb 25 j 09:14	28° \approx 32'13	1°26'01	minimum elong	-764 Mar 14 j 16:40	16° \approx 31'43	1°46'19
max. Earth dist.	-772 Feb 26 j 09:32	28° \approx 34'30	30.85927 AU	max. Earth dist.	-764 Mar 15 j 15:28	16° \approx 33'51	30.82442 AU
retrograde	-772 Apr 06 j 13:04	0° \approx		retrograde	-764 Jun 30 j 07:50	19° \approx 06'53	
min. Earth dist.	-772 Jun 11 j 18:51	1° \approx 07'01		min. Earth dist.	-764 Sep 17 j 10:53	17° \approx 43'00	28.82325 AU
opposition	-772 Aug 20 j 05:40	30° \approx		opposition	-764 Sep 18 j 08:18	17° \approx 41'30	-1°-54'-42
direct	-772 Aug 30 j 08:53	29° \approx 43'11	28.85649 AU	direct	-764 Dec 04 j 14:04	16° \approx 18'06	
conjunction	-772 Aug 31 j 07:18	29° \approx 41'37	-1°-33'-37	conjunction	-763 Mar 17 j 06:16	18° \approx 47'06	-1°-48'-9
direct	-772 Nov 16 j 19:29	28° \approx 18'22		minimum elong	-763 Mar 17 j 06:16	18° \approx 47'06	1°48'09
conjunction	-771 Feb 05 j 23:51	0° \approx		max. Earth dist.	-763 Mar 18 j 05:18	18° \approx 49'16	30.81922 AU
minimum elong	-771 Feb 26 j 21:47	0° \approx 46'40	-1°-29'-2	retrograde	-763 Jul 02 j 19:34	21° \approx 22'14	
max. Earth dist.	-771 Feb 26 j 21:47	0° \approx 46'40	1°29'02	opposition	-763 Sep 20 j 20:10	19° \approx 56'50	-1°-56'-35
retrograde	-771 Feb 27 j 21:50	0° \approx 48'56	30.85211 AU	min. Earth dist.	-763 Sep 19 j 23:42	19° \approx 58'16	28.81773 AU
opposition	-771 Jun 14 j 10:25	3° \approx 21'31		direct	-763 Dec 07 j 02:18	18° \approx 33'21	
min. Earth dist.	-771 Sep 02 j 19:21	1° \approx 56'05	-1°-36'-48	conjunction	-762 Mar 19 j 19:44	21° \approx 02'24	-1°-49'-50
direct	-771 Sep 01 j 20:03	1° \approx 57'43	28.85002 AU	minimum elong	-762 Mar 19 j 19:44	21° \approx 02'24	1°49'51
conjunction	-771 Nov 19 j 08:05	0° \approx 32'48		max. Earth dist.	-762 Mar 20 j 17:49	21° \approx 04'28	30.81364 AU
minimum elong	-770 Mar 01 j 10:22	3° \approx 01'12	-1°-31'-56	retrograde	-762 Jul 05 j 10:13	23° \approx 37'29	
max. Earth dist.	-770 Mar 01 j 10:22	3° \approx 01'12	1°31'57	min. Earth dist.	-762 Sep 22 j 11:13	22° \approx 13'29	28.81214 AU
retrograde	-770 Mar 02 j 10:46	3° \approx 03'30	30.84615 AU	opposition	-762 Sep 23 j 07:59	22° \approx 12'01	-1°-58'-18
min. Earth dist.	-770 Jun 16 j 23:26	5° \approx 36'07		direct	-762 Dec 09 j 15:04	20° \approx 48'27	
opposition	-770 Sep 04 j 09:08	4° \approx 12'15	28.84480 AU	conjunction	-761 Mar 22 j 09:07	23° \approx 17'33	-1°-51'-21
direct	-770 Sep 05 j 07:38	4° \approx 10'41	-1°-39'-50	minimum elong	-761 Mar 22 j 09:07	23° \approx 17'33	1°51'21
conjunction	-770 Nov 21 j 19:29	2° \approx 47'24		max. Earth dist.	-761 Mar 23 j 07:10	23° \approx 19'37	30.80807 AU
minimum elong	-769 Mar 03 j 22:58	5° \approx 15'52	-1°-34'-42	retrograde	-761 Jul 07 j 22:22	25° \approx 52'36	
max. Earth dist.	-769 Mar 03 j 22:57	5° \approx 15'52	1°34'42	opposition	-761 Sep 25 j 19:50	24° \approx 27'05	-1°-59'-49
retrograde	-769 Mar 04 j 23:50	5° \approx 18'13	30.84160 AU	min. Earth dist.	-761 Sep 25 j 00:19	24° \approx 28'27	28.80689 AU
opposition	-769 Jun 19 j 13:27	7° \approx 50'50		direct	-761 Dec 12 j 02:43	23° \approx 03'26	
min. Earth dist.	-769 Sep 07 j 19:46	6° \approx 25'25	-1°-42'-43	conjunction	-760 Mar 23 j 22:44	25° \approx 32'34	-1°-52'-41
direct	-769 Sep 06 j 20:10	6° \approx 27'04	28.84080 AU	minimum elong	-760 Mar 23 j 22:44	25° \approx 32'34	1°52'43
conjunction	-769 Nov 24 j 07:45	5° \approx 02'08		max. Earth dist.	-760 Mar 24 j 20:43	25° \approx 34'38	30.80327 AU
minimum elong	-768 Mar 05 j 11:46	7° \approx 30'42	-1°-37'-19	retrograde	-760 Jul 09 j 12:49	28° \approx 07'33	
max. Earth dist.	-768 Mar 05 j 11:45	7° \approx 30'42	1°37'21	min. Earth dist.	-760 Sep 26 j 11:04	26° \approx 43'26	28.80258 AU
retrograde	-768 Mar 06 j 12:02	7° \approx 32'59	30.83799 AU	opposition	-760 Sep 27 j 07:18	26° \approx 42'00	-2°-1'-10
min. Earth dist.	-768 Jun 21 j 03:16	10° \approx 05'44		direct	-760 Dec 13 j 15:47	25° \approx 18'17	
opposition	-768 Sep 08 j 09:23	8° \approx 41'55	28.83766 AU	conjunction	-759 Mar 26 j 12:18	27° \approx 47'29	-1°-53'-52
direct	-768 Sep 09 j 07:55	8° \approx 40'20	-1°-45'-26	minimum elong	-759 Mar 26 j 12:18	27° \approx 47'29	1°53'52
conjunction	-768 Nov 25 j 18:10	7° \approx 17'03		max. Earth dist.	-759 Mar 27 j 09:28	27° \approx 49'28	30.79947 AU
minimum elong	-767 Mar 08 j 00:53	9° \approx 45'44	-1°-39'-48	retrograde	-759 Jun 04 j 20:13	0° \approx	
retrograde	-767 Mar 08 j 00:53	9° \approx 45'44	1°39'49	retrograde	-759 Jul 12 j 02:28	0° \approx 22'25	

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 10

Attention, astronomical year style is used: The year -759 in astronomical counting style is the year 760 BCE in historical counting style.

	-759 Aug 18 j 18:36	30° R H		retrograde	-751 Jul 30 j 11:11	18° Y 23'48	
opposition	-759 Sep 29 j 18:58	28° H 56'51	-2°-2'-20	opposition	-751 Oct 17 j 14:13	16° Y 58'37	-2°-4'-46
min. Earth dist.	-759 Sep 28 j 23:51	28° H 58'12	28.79956 AU	min. Earth dist.	-751 Oct 16 j 22:38	16° Y 59'43	28.80901 AU
direct	-759 Dec 16 j 03:12	27° H 33'05		direct	-750 Jan 02 j 23:46	15° Y 34'40	
	-758 Mar 28 j 00:56	0° Y					
conjunction	-758 Mar 29 j 01:52	0° Y 02'21	-1°-54'-52	conjunction	-750 Apr 16 j 18:20	18° Y 04'46	-1°-56'-26
minimum elong	-758 Mar 29 j 01:52	0° Y 02'21	1°54'53	minimum elong	-750 Apr 16 j 18:20	18° Y 04'46	1°56'27
max. Earth dist.	-758 Mar 29 j 23:44	0° Y 04'24	30.79717 AU	max. Earth dist.	-750 Apr 17 j 10:21	18° Y 06'16	30.80779 AU
retrograde	-758 Jul 14 j 15:26	2° Y 37'14		retrograde	-750 Aug 02 j 00:38	20° Y 39'17	
min. Earth dist.	-758 Oct 01 j 10:37	1° Y 13'05	28.79799 AU	min. Earth dist.	-750 Oct 19 j 11:42	19° Y 15'05	28.80927 AU
opposition	-758 Oct 02 j 06:25	1° Y 11'41	-2°-3'-18	opposition	-750 Oct 20 j 01:36	19° Y 14'05	-2°-4'-12
	-758 Nov 21 j 20:24	30° R H		direct	-749 Jan 05 j 12:04	17° Y 50'05	
direct	-758 Dec 18 j 15:56	29° H 47'52		conjunction	-749 Apr 19 j 08:44	20° Y 20'14	-1°-55'-50
	-757 Jan 14 j 01:05	0° Y		minimum elong	-749 Apr 19 j 08:44	20° Y 20'14	1°55'50
conjunction	-757 Mar 31 j 15:30	2° Y 17'13	-1°-55'-41	max. Earth dist.	-749 Apr 20 j 00:40	20° Y 21'44	30.80806 AU
minimum elong	-757 Mar 31 j 15:30	2° Y 17'13	1°55'42	retrograde	-749 Aug 04 j 13:35	22° Y 54'37	
max. Earth dist.	-757 Apr 01 j 12:10	2° Y 19'09	30.79641 AU	opposition	-749 Oct 22 j 12:36	21° Y 29'27	-2°-3'-28
retrograde	-757 Jul 17 j 04:16	4° Y 52'05		min. Earth dist.	-749 Oct 21 j 22:36	21° Y 30'27	28.80949 AU
opposition	-757 Oct 04 j 17:56	3° Y 26'33	-2°-4'-5	direct	-748 Jan 08 j 01:43	20° Y 05'22	
min. Earth dist.	-757 Oct 03 j 22:59	3° Y 27'54	28.79810 AU	conjunction	-748 Apr 20 j 23:01	22° Y 35'34	-1°-55'-3
direct	-757 Dec 21 j 02:08	2° Y 02'43		minimum elong	-748 Apr 20 j 23:01	22° Y 35'34	1°55'04
conjunction	-756 Apr 02 j 05:24	4° Y 32'10	-1°-56'-20	max. Earth dist.	-748 Apr 21 j 13:16	22° Y 36'54	30.80850 AU
minimum elong	-756 Apr 02 j 05:24	4° Y 32'10	1°56'22	retrograde	-748 Aug 06 j 02:40	25° Y 09'50	
max. Earth dist.	-756 Apr 03 j 02:55	4° Y 34'12	30.79719 AU	opposition	-748 Oct 23 j 23:43	23° Y 44'40	-2°-2'-32
retrograde	-756 Jul 18 j 16:25	7° Y 07'00		min. Earth dist.	-748 Oct 23 j 10:59	23° Y 45'34	28.81027 AU
min. Earth dist.	-756 Oct 05 j 10:31	5° Y 42'52	28.79942 AU	direct	-747 Jan 09 j 12:48	22° Y 20'30	
opposition	-756 Oct 06 j 05:22	5° Y 41'32	-2°-4'-41	conjunction	-747 Apr 23 j 13:23	24° Y 50'46	-1°-54'-6
direct	-756 Dec 22 j 13:41	4° Y 17'42		minimum elong	-747 Apr 23 j 13:23	24° Y 50'46	1°54'06
conjunction	-755 Apr 04 j 19:15	6° Y 47'16	-1°-56'-48	max. Earth dist.	-747 Apr 24 j 04:08	24° Y 52'09	30.80964 AU
minimum elong	-755 Apr 04 j 19:15	6° Y 47'16	1°56'48	retrograde	-747 Aug 08 j 15:07	27° Y 24'53	
max. Earth dist.	-755 Apr 05 j 15:13	6° Y 49'09	30.79910 AU	opposition	-747 Oct 26 j 10:38	25° Y 59'45	-2°-1'-25
retrograde	-755 Jul 21 j 06:27	9° Y 22'05		min. Earth dist.	-747 Oct 25 j 22:11	26° Y 00'38	28.81186 AU
opposition	-755 Oct 08 j 16:43	7° Y 56'41	-2°-5'-5	direct	-746 Jan 12 j 01:25	24° Y 35'32	
min. Earth dist.	-755 Oct 07 j 22:16	7° Y 57'59	28.80176 AU	conjunction	-746 Apr 26 j 03:33	27° Y 05'51	-1°-52'-58
direct	-755 Dec 24 j 23:24	6° Y 32'51		minimum elong	-746 Apr 26 j 03:33	27° Y 05'51	1°52'59
conjunction	-754 Apr 07 j 09:20	9° Y 02'32	-1°-57'-5	max. Earth dist.	-746 Apr 26 j 16:37	27° Y 07'04	30.81195 AU
minimum elong	-754 Apr 07 j 09:20	9° Y 02'32	1°57'07	retrograde	-746 Aug 11 j 03:45	29° Y 39'50	
max. Earth dist.	-754 Apr 08 j 05:39	9° Y 04'27	30.80162 AU	opposition	-746 Oct 28 j 21:33	28° Y 14'43	-2°00'-7
retrograde	-754 Jul 23 j 17:56	11° Y 37'20		min. Earth dist.	-746 Oct 28 j 09:29	28° Y 15'35	28.81490 AU
min. Earth dist.	-754 Oct 10 j 10:45	10° Y 13'15	28.80436 AU	direct	-745 Jan 14 j 11:58	26° Y 50'26	
opposition	-754 Oct 11 j 04:09	10° Y 12'01	-2°-5'-17	conjunction	-745 Apr 28 j 17:51	29° Y 20'49	-1°-51'-40
direct	-754 Dec 27 j 10:59	8° Y 48'11		minimum elong	-745 Apr 28 j 17:51	29° Y 20'49	1°51'40
conjunction	-753 Apr 09 j 23:23	11° Y 17'59	-1°-57'-12	max. Earth dist.	-745 Apr 29 j 07:21	29° Y 22'05	30.81566 AU
minimum elong	-753 Apr 09 j 23:23	11° Y 17'59	1°57'11		-745 May 16 j 09:04	0° 8	
max. Earth dist.	-753 Apr 10 j 18:16	11° Y 19'46	30.80424 AU	retrograde	-745 Aug 13 j 14:03	1° 8 54'42	
retrograde	-753 Jul 26 j 08:22	13° Y 52'45		opposition	-745 Oct 31 j 08:31	0° 8 29'37	-1°-58'-38
opposition	-753 Oct 13 j 15:33	12° Y 27'29	-2°-5'-18	min. Earth dist.	-745 Oct 30 j 21:18	0° 8 30'25	28.81928 AU
min. Earth dist.	-753 Oct 12 j 22:16	12° Y 28'43	28.80673 AU		-745 Nov 18 j 01:56	30° R Y	
direct	-753 Dec 29 j 23:06	11° Y 03'38		direct	-744 Jan 16 j 23:47	29° Y 05'19	
conjunction	-752 Apr 11 j 13:46	13° Y 33'34	-1°-57'-7		-744 Mar 15 j 04:33	0° 8	
minimum elong	-752 Apr 11 j 13:46	13° Y 33'34	1°57'08	conjunction	-744 Apr 30 j 08:10	1° 8 35'46	-1°-50'-11
max. Earth dist.	-752 Apr 12 j 08:04	13° Y 35'17	30.80616 AU	minimum elong	-744 Apr 30 j 08:11	1° 8 35'46	1°50'12
retrograde	-752 Jul 27 j 20:31	16° Y 08'16		max. Earth dist.	-744 Apr 30 j 20:13	1° 8 36'54	30.82091 AU
min. Earth dist.	-752 Oct 14 j 11:29	14° Y 44'09	28.80826 AU	retrograde	-744 Aug 15 j 03:22	4° 8 09'31	
opposition	-752 Oct 15 j 02:56	14° Y 43'03	-2°-5'-8	opposition	-744 Nov 01 j 19:13	2° 8 44'31	-1°-56'-58
direct	-752 Dec 31 j 10:13	13° Y 19'10		min. Earth dist.	-744 Nov 01 j 07:53	2° 8 45'19	28.82517 AU
conjunction	-751 Apr 14 j 04:11	15° Y 49'11	-1°-56'-52	direct	-743 Jan 18 j 10:56	1° 8 20'10	
minimum elong	-751 Apr 14 j 04:11	15° Y 49'11	1°56'52	conjunction	-743 May 02 j 22:36	3° 8 50'43	-1°-48'-33
max. Earth dist.	-751 Apr 14 j 21:30	15° Y 50'48	30.80737 AU	minimum elong	-743 May 02 j 22:36	3° 8 50'43	1°48'33
				max. Earth dist.	-743 May 03 j 10:32	3° 8 51'50	30.82740 AU

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Attention, astronomical year style is used: The year -743 in astronomical counting style is the year 744 BCE in historical counting style.

retrograde	-743 Aug 17 j 14:35	6°8'24"22		minimum elong	-735 May 21 j 19:01	21°8'50"55	1°29'41
opposition	-743 Nov 04 j 06:11	4°8'59"27	-1°-55'-7	max. Earth dist.	-735 May 21 j 21:40	21°8'51"10	30.87487 AU
min. Earth dist.	-743 Nov 03 j 20:24	5°8'00"09	28.83216 AU	retrograde	-735 Sep 04 j 19:24	24°8'23"22	
direct	-742 Jan 20 j 21:12	3°8'35"06		opposition	-735 Nov 21 j 19:59	22°8'58"57	-1°-34'-18
				min. Earth dist.	-735 Nov 21 j 16:56	22°8'59"10	28.87796 AU
conjunction	-742 May 05 j 12:54	6°8'05"45	-1°-46'-44	direct	-734 Feb 08 j 00:07	21°8'34"15	
minimum elong	-742 May 05 j 12:54	6°8'05"45	1°46'45				
max. Earth dist.	-742 May 05 j 23:59	6°8'06"47	30.83491 AU	conjunction	-734 May 24 j 09:15	24°8'05"27	-1°-26'-41
retrograde	-742 Aug 20 j 03:59	8°8'39"17		minimum elong	-734 May 24 j 09:16	24°8'05"27	1°26'41
opposition	-742 Nov 06 j 16:57	7°8'14"28	-1°-53'-5	max. Earth dist.	-734 May 24 j 11:49	24°8'05"41	30.87981 AU
min. Earth dist.	-742 Nov 06 j 07:01	7°8'15"10	28.83979 AU	retrograde	-734 Sep 07 j 05:19	26°8'37"44	
direct	-741 Jan 23 j 10:36	5°8'50"06		opposition	-734 Nov 24 j 06:35	25°8'13"22	-1°-31'-1
				min. Earth dist.	-734 Nov 24 j 05:08	25°8'13"28	28.88335 AU
conjunction	-741 May 08 j 03:26	8°8'20"51	-1°-44'-45	direct	-733 Feb 10 j 10:28	23°8'48"36	
minimum elong	-741 May 08 j 03:26	8°8'20"51	1°44'46				
max. Earth dist.	-741 May 08 j 13:16	8°8'21"46	30.84256 AU	conjunction	-733 May 26 j 23:34	26°8'19"51	-1°-23'-33
retrograde	-741 Aug 22 j 16:30	10°8'54"17		minimum elong	-733 May 26 j 23:35	26°8'19"51	1°23'34
opposition	-741 Nov 09 j 03:47	9°8'29"33	-1°-50'-53	max. Earth dist.	-733 May 27 j 01:07	26°8'20"00	30.88588 AU
min. Earth dist.	-741 Nov 08 j 19:48	9°8'30"07	28.84734 AU	retrograde	-733 Sep 09 j 17:09	28°8'51"57	
direct	-740 Jan 25 j 22:17	8°8'05"11		opposition	-733 Nov 26 j 16:52	27°8'27"40	-1°-27'-37
				min. Earth dist.	-733 Nov 26 j 15:06	27°8'27"47	28.88995 AU
conjunction	-740 May 09 j 18:13	10°8'36"02	-1°-42'-37	direct	-732 Feb 12 j 23:59	26°8'02"50	
minimum elong	-740 May 09 j 18:13	10°8'36"02	1°42'37				
max. Earth dist.	-740 May 10 j 03:22	10°8'36"53	30.84987 AU	conjunction	-732 May 28 j 13:53	28°8'34"10	-1°-20'-18
retrograde	-740 Aug 24 j 05:49	13°8'09"20		minimum elong	-732 May 28 j 13:54	28°8'34"10	1°20'19
opposition	-740 Nov 10 j 14:37	11°8'44"41	-1°-48'-30	max. Earth dist.	-732 May 28 j 14:35	28°8'34"14	30.89313 AU
min. Earth dist.	-740 Nov 10 j 06:51	11°8'45"14	28.85411 AU		-732 Jul 08 j 06:52	0°8'06"07	
direct	-739 Jan 27 j 11:57	10°8'20"17		retrograde	-732 Sep 11 j 04:19	1°8'06"07	
					-732 Nov 17 j 10:21	30°8'06"07	
conjunction	-739 May 12 j 08:45	12°8'51"13	-1°-40'-19	opposition	-732 Nov 28 j 03:25	29°8'41"53	-1°-24'-4
minimum elong	-739 May 12 j 08:46	12°8'51"13	1°40'19	min. Earth dist.	-732 Nov 28 j 03:09	29°8'41"54	28.89793 AU
max. Earth dist.	-739 May 12 j 15:46	12°8'51"52	30.85617 AU	direct	-731 Feb 14 j 11:14	28°8'17"03	
	-739 Jul 19 j 07:18	15°8'06"21			-731 May 09 j 02:25	0°8'17"03	
retrograde	-739 Aug 26 j 19:10	15°8'24"22				0°8'17"03	
	-739 Oct 04 j 16:30	15°8'24"22		conjunction	-731 May 31 j 04:03	0°8'17"03	
opposition	-739 Nov 13 j 01:30	13°8'59"47	-1°-45'-58	minimum elong	-731 May 31 j 04:03	0°8'17"03	-1°-16'-55
min. Earth dist.	-739 Nov 12 j 19:23	14°8'00"13	28.85995 AU	max. Earth dist.	-731 May 31 j 04:29	0°8'17"03	1°16'56
direct	-738 Jan 29 j 23:29	12°8'35"21		retrograde	-731 Sep 13 j 16:39	0°8'17"03	30.90188 AU
	-738 May 12 j 03:23	15°8'06"21		opposition	-731 Nov 30 j 13:46	3°8'17"03	-1°-20'-24
				min. Earth dist.	-731 Nov 30 j 13:17	1°8'17"03	28.90715 AU
conjunction	-738 May 14 j 23:28	15°8'06"21	-1°-37'-52	direct	-730 Feb 17 j 00:17	0°8'17"03	0°8'17"03
minimum elong	-738 May 14 j 23:29	15°8'06"21	1°37'53				
max. Earth dist.	-738 May 15 j 06:21	15°8'07"00	30.86158 AU	conjunction	-730 Jun 02 j 18:11	3°8'17"03	-1°-13'-26
retrograde	-738 Aug 29 j 07:47	17°8'39"20		minimum elong	-730 Jun 02 j 18:11	3°8'17"03	1°13'27
opposition	-738 Nov 15 j 12:13	16°8'14"48	-1°-43'-16	max. Earth dist.	-730 Jun 02 j 17:04	3°8'17"03	30.91171 AU
min. Earth dist.	-738 Nov 15 j 06:56	16°8'15"10	28.86481 AU	retrograde	-730 Sep 16 j 05:40	5°8'17"03	
	-737 Jan 08 j 09:53	15°8'06"21		opposition	-730 Dec 03 j 00:08	4°8'17"03	-1°-16'-36
direct	-737 Feb 01 j 12:57	14°8'50"18		min. Earth dist.	-730 Dec 03 j 01:00	4°8'17"03	28.91743 AU
	-737 Feb 25 j 09:18	15°8'06"21		direct	-729 Feb 19 j 11:46	2°8'17"03	2°8'17"03
conjunction	-737 May 17 j 13:57	17°8'21"22	-1°-35'-17	conjunction	-729 Jun 05 j 08:30	5°8'17"03	-1°-9'-49
minimum elong	-737 May 17 j 13:57	17°8'21"22	1°35'17	minimum elong	-729 Jun 05 j 08:30	5°8'17"03	1°09'50
max. Earth dist.	-737 May 17 j 18:32	17°8'21"47	30.86623 AU	max. Earth dist.	-729 Jun 05 j 07:27	5°8'17"03	30.92224 AU
retrograde	-737 Aug 31 j 20:14	19°8'54"10		retrograde	-729 Sep 18 j 18:09	7°8'17"03	
opposition	-737 Nov 17 j 22:55	18°8'29"41	-1°-40'-26	opposition	-729 Dec 05 j 10:32	6°8'17"03	-1°-12'-41
min. Earth dist.	-737 Nov 17 j 18:31	18°8'29"59	28.86920 AU	min. Earth dist.	-729 Dec 05 j 12:11	6°8'17"03	28.92785 AU
direct	-736 Feb 04 j 00:31	17°8'05"07		direct	-728 Feb 22 j 01:47	4°8'17"03	4°8'17"03
conjunction	-736 May 19 j 04:37	19°8'36"13	-1°-32'-33	conjunction	-728 Jun 06 j 22:42	7°8'17"03	-1°-6'-7
minimum elong	-736 May 19 j 04:37	19°8'36"13	1°32'33	minimum elong	-728 Jun 06 j 22:42	7°8'17"03	1°06'07
max. Earth dist.	-736 May 19 j 09:09	19°8'36"39	30.87046 AU	max. Earth dist.	-728 Jun 06 j 19:26	7°8'17"03	30.93259 AU
retrograde	-736 Sep 02 j 06:32	22°8'08"51		retrograde	-728 Sep 20 j 06:30	10°8'17"03	
opposition	-736 Nov 19 j 09:28	20°8'44"24	-1°-37'-26	opposition	-728 Dec 06 j 20:56	8°8'17"03	-1°-8'-40
min. Earth dist.	-736 Nov 19 j 06:24	20°8'44"37	28.87333 AU	min. Earth dist.	-728 Dec 06 j 23:28	8°8'17"03	28.93796 AU
direct	-735 Feb 05 j 12:48	19°8'19"46		direct	-727 Feb 23 j 13:25	7°8'17"03	7°8'17"03
conjunction	-735 May 21 j 19:00	21°8'50"55	-1°-29'-41	conjunction	-727 Jun 09 j 13:03	9°8'17"03	-1°-2'-18

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Attention, astronomical year style is used: The year -727 in astronomical counting style is the year 728 BCE in historical counting style.

minimum elong	-727 Jun 09 j 13:03	9°II45'51	1°02'19	retrograde	-719 Oct 10 j 10:01	0°☾04'10	
max. Earth dist.	-727 Jun 09 j 09:39	9°II45'33	30.94229 AU		-719 Oct 26 j 00:00	30°☾II	
retrograde	-727 Sep 22 j 17:38	12°II17'02		opposition	-719 Dec 26 j 17:36	28°II40'50	0°-28'-51
opposition	-727 Dec 09 j 07:28	10°II53'18	-1°-4'-32	min. Earth dist.	-719 Dec 27 j 03:04	28°II40'10	29.01349 AU
min. Earth dist.	-727 Dec 09 j 11:27	10°II53'01	28.94717 AU	direct	-718 Mar 16 j 03:08	27°II15'33	
direct	-726 Feb 26 j 02:02	9°II28'25					
				conjunction	-718 Jun 30 j 17:00	29°II47'25	0°-24'-47
conjunction	-726 Jun 12 j 03:03	12°II00'09	0°-58'-24	minimum elong	-718 Jun 30 j 17:00	29°II47'26	0°24'47
minimum elong	-726 Jun 12 j 03:03	12°II00'09	0°58'24	max. Earth dist.	-718 Jun 30 j 05:57	29°II46'25	31.01934 AU
max. Earth dist.	-726 Jun 11 j 21:25	11°II59'38	30.95113 AU		-718 Jul 06 j 08:34	0°☾	
retrograde	-726 Sep 25 j 06:34	14°II31'09		retrograde	-718 Oct 12 j 20:53	2°☾16'55	
opposition	-726 Dec 11 j 17:51	13°II07'28	-1°00'-20	opposition	-718 Dec 29 j 03:52	0°☾53'43	0°-24'-9
min. Earth dist.	-726 Dec 11 j 22:08	13°II07'10	28.95549 AU	min. Earth dist.	-718 Dec 29 j 14:25	0°☾52'58	29.02565 AU
direct	-725 Feb 28 j 13:56	11°II42'32			-717 Feb 01 j 12:30	30°☾II	
				direct	-717 Mar 18 j 15:52	29°II28'27	
conjunction	-725 Jun 14 j 17:19	14°II14'18	0°-54'-26		-717 May 02 j 00:09	0°☾	
minimum elong	-725 Jun 14 j 17:19	14°II14'18	0°54'26	conjunction	-717 Jul 03 j 06:21	2°☾00'23	0°-20'-22
max. Earth dist.	-725 Jun 14 j 11:12	14°II13'44	30.95898 AU	minimum elong	-717 Jul 03 j 06:21	2°☾00'23	0°20'23
retrograde	-725 Sep 27 j 15:45	16°II45'05		max. Earth dist.	-717 Jul 02 j 17:32	1°☾59'12	31.03198 AU
opposition	-725 Dec 14 j 04:14	15°II21'28	0°-56'-2	retrograde	-717 Oct 15 j 09:44	4°☾29'44	
min. Earth dist.	-725 Dec 14 j 10:31	15°II21'01	28.96293 AU	opposition	-717 Dec 31 j 13:57	3°☾06'40	0°-19'-24
direct	-724 Mar 02 j 01:02	13°II56'28		min. Earth dist.	-716 Jan 01 j 00:27	3°☾05'55	29.03849 AU
				direct	-716 Mar 20 j 03:34	1°☾41'26	
conjunction	-724 Jun 16 j 07:23	16°II28'13	0°-50'-22				
minimum elong	-724 Jun 16 j 07:23	16°II28'13	0°50'23	conjunction	-716 Jul 04 j 19:50	4°☾13'25	0°-15'-55
max. Earth dist.	-724 Jun 15 j 23:46	16°II27'31	30.96626 AU	minimum elong	-716 Jul 04 j 19:51	4°☾13'25	0°15'55
retrograde	-724 Sep 29 j 02:40	18°II58'48		max. Earth dist.	-716 Jul 04 j 07:00	4°☾12'15	31.04479 AU
opposition	-724 Dec 15 j 14:30	17°II35'13	0°-51'-40	retrograde	-716 Oct 16 j 19:09	6°☾42'39	
min. Earth dist.	-724 Dec 15 j 20:45	17°II34'47	28.96993 AU	opposition	-715 Jan 02 j 00:23	5°☾19'42	0°-14'-37
direct	-723 Mar 04 j 14:17	16°II10'09		min. Earth dist.	-715 Jan 02 j 12:41	5°☾18'50	29.05121 AU
				direct	-715 Mar 22 j 14:29	3°☾54'30	
conjunction	-723 Jun 18 j 21:11	18°II41'55	0°-46'-15				
minimum elong	-723 Jun 18 j 21:11	18°II41'55	0°46'16	conjunction	-715 Jul 07 j 09:00	6°☾26'32	0°-11'-26
max. Earth dist.	-723 Jun 18 j 12:43	18°II41'08	30.97315 AU	minimum elong	-715 Jul 07 j 09:00	6°☾26'32	0°11'27
retrograde	-723 Oct 01 j 12:42	21°II12'17		behind sun begin	-715 Jul 07 j 04:19	6°☾26'07	
opposition	-723 Dec 18 j 00:52	19°II48'44	0°-47'-13	behind sun end	-715 Jul 07 j 13:41	6°☾26'57	
min. Earth dist.	-723 Dec 18 j 08:47	19°II48'11	28.97694 AU	max. Earth dist.	-715 Jul 06 j 18:48	6°☾25'13	31.05730 AU
direct	-722 Mar 07 j 01:00	18°II23'35		retrograde	-715 Oct 19 j 06:04	8°☾55'38	
				opposition	-714 Jan 04 j 10:41	7°☾32'47	0°-9'-49
conjunction	-722 Jun 21 j 10:58	20°II55'21	0°-42'-4	min. Earth dist.	-714 Jan 04 j 22:52	7°☾31'56	29.06330 AU
minimum elong	-722 Jun 21 j 10:58	20°II55'21	0°42'04	direct	-714 Mar 25 j 02:56	6°☾07'35	
max. Earth dist.	-722 Jun 21 j 02:00	20°II54'31	30.98041 AU				
retrograde	-722 Oct 03 j 23:34	23°II25'31		conjunction	-714 Jul 09 j 22:18	8°☾39'39	0°-6'-58
opposition	-722 Dec 20 j 10:56	22°II02'00	0°-42'-43	minimum elong	-714 Jul 09 j 22:19	8°☾39'40	0°06'58
min. Earth dist.	-722 Dec 20 j 18:47	22°II01'27	28.98438 AU	behind sun begin	-714 Jul 09 j 16:13	8°☾39'07	
direct	-721 Mar 09 j 14:09	20°II36'47		behind sun end	-714 Jul 10 j 04:24	8°☾40'12	
				max. Earth dist.	-714 Jul 09 j 07:15	8°☾38'16	31.06884 AU
conjunction	-721 Jun 24 j 00:36	23°II08'34	0°-37'-49	retrograde	-714 Oct 21 j 16:11	11°☾08'37	
minimum elong	-721 Jun 24 j 00:36	23°II08'34	0°37'50	opposition	-713 Jan 06 j 21:02	9°☾45'51	0°-5'-1
max. Earth dist.	-721 Jun 23 j 14:12	23°II07'36	30.98826 AU	min. Earth dist.	-713 Jan 07 j 11:02	9°☾44'52	29.07442 AU
retrograde	-721 Oct 06 j 11:02	25°II38'32		direct	-713 Mar 27 j 12:36	8°☾20'39	
opposition	-721 Dec 22 j 21:12	24°II15'04	0°-38'-9				
min. Earth dist.	-721 Dec 23 j 06:07	24°II14'26	28.99281 AU	conjunction	-713 Jul 12 j 11:36	10°☾52'44	0°-2'-28
direct	-720 Mar 11 j 01:57	22°II49'48		minimum elong	-713 Jul 12 j 11:36	10°☾52'44	0°02'30
				behind sun begin	-713 Jul 12 j 05:02	10°☾52'09	
conjunction	-720 Jun 25 j 14:13	25°II21'36	0°-33'-31	behind sun end	-713 Jul 12 j 18:10	10°☾53'19	
minimum elong	-720 Jun 25 j 14:13	25°II21'36	0°33'31	max. Earth dist.	-713 Jul 11 j 19:43	10°☾51'16	31.07943 AU
max. Earth dist.	-720 Jun 25 j 04:11	25°II20'40	30.99725 AU	retrograde	-713 Oct 24 j 02:30	13°☾21'32	
retrograde	-720 Oct 07 j 21:59	27°II51'23		opposition	-712 Jan 09 j 07:24	11°☾58'51	0°00'-12
opposition	-720 Dec 24 j 07:24	26°II27'59	0°-33'-32	min. Earth dist.	-712 Jan 09 j 21:31	11°☾57'51	29.08438 AU
min. Earth dist.	-720 Dec 24 j 16:39	26°II27'20	29.00237 AU	asc. node	-712 Jan 26 j 11:27	11°☾30'29	
direct	-719 Mar 13 j 15:50	25°II02'42		direct	-712 Mar 29 j 01:36	10°☾33'37	
				max. Earth dist.	-712 Jul 13 j 07:10	13°☾04'05	31.08888 AU
conjunction	-719 Jun 28 j 03:36	27°II34'31	0°-29'-10				
minimum elong	-719 Jun 28 j 03:36	27°II34'31	0°29'11	conjunction	-712 Jul 14 j 00:38	13°☾05'42	0°02'08
max. Earth dist.	-719 Jun 27 j 15:58	27°II33'27	31.00760 AU	minimum elong	-712 Jul 14 j 00:37	13°☾05'42	0°02'09
	-719 Sep 24 j 20:31	0°☾					

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 13

Attention, astronomical year style is used: The year -712 in astronomical counting style is the year 713 BCE in historical counting style.

behind sun begin	-712 Jul 13 j 18:02	13° $\overline{05}$ 07		opposition	-704 Jan 26 j 18:19	29° $\overline{36}$ 32	0°37'29
behind sun end	-712 Jul 14 j 07:12	13° $\overline{06}$ 17		min. Earth dist.	-704 Jan 27 j 12:54	29° $\overline{35}$ 14	29.16307 AU
retrograde	-712 Oct 25 j 13:15	15° $\overline{34}$ 21		direct	-704 Apr 16 j 03:00	28° $\overline{11}$ 12	
opposition	-711 Jan 10 j 17:48	14° $\overline{11}$ 41	0°04'35		-704 Jul 12 j 14:11	0° $\overline{00}$	
min. Earth dist.	-711 Jan 11 j 09:09	14° $\overline{10}$ 37	29.09351 AU	max. Earth dist.	-704 Jul 31 j 08:20	0° $\overline{41}$ 13	31.16895 AU
direct	-711 Mar 31 j 13:18	12° $\overline{46}$ 26					
conjunction	-711 Jul 16 j 13:37	15° $\overline{18}$ 30	0°06'37	conjunction	-704 Aug 01 j 04:41	0° $\overline{43}$ 06	0°37'16
minimum elong	-711 Jul 16 j 13:37	15° $\overline{18}$ 30	0°06'37	minimum elong	-704 Aug 01 j 04:41	0° $\overline{43}$ 06	0°37'17
behind sun begin	-711 Jul 16 j 07:29	15° $\overline{17}$ 57		retrograde	-704 Nov 12 j 00:36	3° $\overline{10}$ 36	
behind sun end	-711 Jul 16 j 19:46	15° $\overline{19}$ 02		opposition	-703 Jan 28 j 04:48	1° $\overline{48}$ 23	0°42'01
max. Earth dist.	-711 Jul 15 j 20:18	15° $\overline{16}$ 54	31.09767 AU	min. Earth dist.	-703 Jan 28 j 23:10	1° $\overline{47}$ 06	29.17529 AU
retrograde	-711 Oct 27 j 23:25	17° $\overline{46}$ 58		direct	-703 Apr 18 j 15:42	0° $\overline{23}$ 05	
opposition	-710 Jan 13 j 04:08	16° $\overline{24}$ 21	0°09'22	conjunction	-703 Aug 03 j 16:49	2° $\overline{55}$ 00	0°41'29
min. Earth dist.	-710 Jan 13 j 20:07	16° $\overline{23}$ 14	29.10200 AU	minimum elong	-703 Aug 03 j 16:49	2° $\overline{55}$ 00	0°41'29
direct	-710 Apr 03 j 03:00	14° $\overline{59}$ 03		max. Earth dist.	-703 Aug 02 j 19:18	2° $\overline{53}$ 00	31.18089 AU
max. Earth dist.	-710 Jul 18 j 07:18	17° $\overline{29}$ 19	31.10606 AU	retrograde	-703 Nov 14 j 11:04	5° $\overline{22}$ 24	
conjunction	-710 Jul 19 j 02:18	17° $\overline{31}$ 05	0°11'05	opposition	-702 Jan 30 j 15:22	4° $\overline{00}$ 16	0°46'29
minimum elong	-710 Jul 19 j 02:18	17° $\overline{31}$ 05	0°11'06	min. Earth dist.	-702 Jan 31 j 10:42	3° $\overline{58}$ 55	29.18704 AU
behind sun begin	-710 Jul 18 j 21:27	17° $\overline{30}$ 39		direct	-702 Apr 21 j 02:03	2° $\overline{35}$ 00	
behind sun end	-710 Jul 19 j 07:08	17° $\overline{31}$ 30		max. Earth dist.	-702 Aug 05 j 07:43	5° $\overline{04}$ 56	31.19205 AU
retrograde	-710 Oct 30 j 10:58	19° $\overline{59}$ 23		conjunction	-702 Aug 06 j 04:59	5° $\overline{06}$ 55	0°45'37
opposition	-709 Jan 15 j 14:26	18° $\overline{36}$ 47	0°14'08	minimum elong	-702 Aug 06 j 04:59	5° $\overline{06}$ 55	0°45'39
min. Earth dist.	-709 Jan 16 j 06:45	18° $\overline{35}$ 39	29.11044 AU	retrograde	-702 Nov 16 j 20:56	7° $\overline{34}$ 13	
direct	-709 Apr 05 j 14:25	17° $\overline{11}$ 27		opposition	-701 Feb 02 j 02:03	6° $\overline{12}$ 09	0°50'53
conjunction	-709 Jul 21 j 15:05	19° $\overline{43}$ 27	0°15'31	min. Earth dist.	-701 Feb 02 j 22:03	6° $\overline{10}$ 45	29.19752 AU
minimum elong	-709 Jul 21 j 15:05	19° $\overline{43}$ 27	0°15'31	direct	-701 Apr 23 j 14:46	4° $\overline{46}$ 55	
behind sun begin	-709 Jul 21 j 13:45	19° $\overline{43}$ 19		conjunction	-701 Aug 08 j 17:00	7° $\overline{18}$ 48	0°49'42
behind sun end	-709 Jul 21 j 16:25	19° $\overline{43}$ 34		minimum elong	-701 Aug 08 j 17:00	7° $\overline{18}$ 48	0°49'42
max. Earth dist.	-709 Jul 20 j 20:40	19° $\overline{41}$ 45	31.11449 AU	max. Earth dist.	-701 Aug 07 j 18:02	7° $\overline{16}$ 40	31.20183 AU
retrograde	-709 Nov 01 j 21:24	22° $\overline{11}$ 34		retrograde	-701 Nov 19 j 08:34	9° $\overline{46}$ 01	
opposition	-708 Jan 18 j 00:46	20° $\overline{49}$ 00	0°18'53	opposition	-700 Feb 04 j 12:42	8° $\overline{24}$ 00	0°55'12
min. Earth dist.	-708 Jan 18 j 18:06	20° $\overline{47}$ 47	29.11906 AU	min. Earth dist.	-700 Feb 05 j 08:59	8° $\overline{22}$ 35	29.20674 AU
direct	-708 Apr 07 j 04:29	19° $\overline{23}$ 38		direct	-700 Apr 25 j 01:55	6° $\overline{58}$ 46	
max. Earth dist.	-708 Jul 22 j 07:43	21° $\overline{53}$ 45	31.12351 AU	max. Earth dist.	-700 Aug 09 j 06:37	9° $\overline{28}$ 33	31.21026 AU
conjunction	-708 Jul 23 j 03:33	21° $\overline{55}$ 35	0°19'56	conjunction	-700 Aug 10 j 05:06	9° $\overline{30}$ 38	0°53'42
minimum elong	-708 Jul 23 j 03:33	21° $\overline{55}$ 35	0°19'57	minimum elong	-700 Aug 10 j 05:05	9° $\overline{30}$ 38	0°53'43
retrograde	-708 Nov 03 j 09:22	24° $\overline{23}$ 33		retrograde	-700 Nov 20 j 18:54	11° $\overline{57}$ 45	
opposition	-707 Jan 19 j 11:07	23° $\overline{01}$ 01	0°23'36	opposition	-699 Feb 05 j 23:33	10° $\overline{35}$ 45	0°59'26
min. Earth dist.	-707 Jan 20 j 03:52	22° $\overline{59}$ 51	29.12858 AU	min. Earth dist.	-699 Feb 06 j 20:58	10° $\overline{34}$ 16	29.21454 AU
direct	-707 Apr 09 j 17:20	21° $\overline{35}$ 37		direct	-699 Apr 27 j 15:45	9° $\overline{10}$ 32	
conjunction	-707 Jul 25 j 15:53	24° $\overline{07}$ 33	0°24'20	conjunction	-699 Aug 12 j 16:42	11° $\overline{42}$ 21	0°57'38
minimum elong	-707 Jul 25 j 15:53	24° $\overline{07}$ 33	0°24'20	minimum elong	-699 Aug 12 j 16:42	11° $\overline{42}$ 21	0°57'37
max. Earth dist.	-707 Jul 24 j 20:38	24° $\overline{05}$ 47	31.13345 AU	max. Earth dist.	-699 Aug 11 j 16:42	11° $\overline{40}$ 07	31.21749 AU
retrograde	-707 Nov 05 j 18:16	26° $\overline{35}$ 23		retrograde	-699 Nov 23 j 06:45	14° $\overline{09}$ 22	
opposition	-706 Jan 21 j 21:36	25° $\overline{12}$ 54	0°28'16	opposition	-698 Feb 08 j 10:11	12° $\overline{47}$ 23	1°03'35
min. Earth dist.	-706 Jan 22 j 15:34	25° $\overline{11}$ 39	29.13915 AU	min. Earth dist.	-698 Feb 09 j 07:12	12° $\overline{45}$ 56	29.22127 AU
direct	-706 Apr 12 j 04:57	23° $\overline{47}$ 31		direct	-698 Apr 30 j 04:45	11° $\overline{22}$ 09	
max. Earth dist.	-706 Jul 27 j 08:09	26° $\overline{17}$ 34	31.14463 AU	max. Earth dist.	-698 Aug 14 j 04:50	13° $\overline{51}$ 44	31.22366 AU
conjunction	-706 Jul 28 j 04:11	26° $\overline{19}$ 25	0°28'41	conjunction	-698 Aug 15 j 04:30	13° $\overline{53}$ 56	1°01'28
minimum elong	-706 Jul 28 j 04:11	26° $\overline{19}$ 25	0°28'42	minimum elong	-698 Aug 15 j 04:29	13° $\overline{53}$ 56	1°01'28
retrograde	-706 Nov 08 j 04:58	28° $\overline{47}$ 06			-698 Sep 14 j 19:29	15° $\overline{00}$	
opposition	-705 Jan 24 j 07:47	27° $\overline{24}$ 43	0°32'54	retrograde	-698 Nov 25 j 15:39	16° $\overline{20}$ 50	
min. Earth dist.	-705 Jan 25 j 01:06	27° $\overline{23}$ 30	29.15077 AU	opposition	-697 Feb 10 j 20:51	14° $\overline{58}$ 52	1°07'37
direct	-705 Apr 14 j 17:15	25° $\overline{59}$ 20			-697 Feb 10 j 04:26	15° $\overline{00}$	
conjunction	-705 Jul 30 j 16:32	28° $\overline{31}$ 15	0°33'00	min. Earth dist.	-697 Feb 11 j 19:20	14° $\overline{57}$ 18	29.22717 AU
minimum elong	-705 Jul 30 j 16:32	28° $\overline{31}$ 15	0°33'00	direct	-697 May 02 j 16:49	13° $\overline{33}$ 36	
max. Earth dist.	-705 Jul 29 j 20:21	28° $\overline{29}$ 23	31.15658 AU		-697 Jul 18 j 09:45	15° $\overline{00}$	
retrograde	-705 Sep 11 j 05:32	0° $\overline{00}$		conjunction	-697 Aug 17 j 15:59	16° $\overline{05}$ 19	1°05'12
	-705 Nov 10 j 15:01	0° $\overline{58}$ 50		minimum elong	-697 Aug 17 j 15:59	16° $\overline{05}$ 19	1°05'12
	-704 Jan 12 j 12:42	30° $\overline{00}$		max. Earth dist.	-697 Aug 16 j 15:37	16° $\overline{03}$ 03	31.22938 AU

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Attention, astronomical year style is used: The year -697 in astronomical counting style is the year 698 BCE in historical counting style.

retrograde	-697 Nov 28 j 02:05	18°♏32'07		retrograde	-689 Dec 15 j 10:07	6°♐00'00	
opposition	-696 Feb 13 j 07:31	17°♏10'09	1°11'34	opposition	-688 Mar 01 j 22:59	4°♐38'18	1°38'53
min. Earth dist.	-696 Feb 14 j 05:15	17°♏08'39	29.23280 AU	min. Earth dist.	-688 Mar 02 j 21:56	4°♐36'44	29.29388 AU
direct	-696 May 04 j 05:55	15°♏44'53		direct	-688 May 22 j 01:58	3°♐13'19	
max. Earth dist.	-696 Aug 18 j 03:02	18°♏14'17	31.23497 AU				
				conjunction	-688 Sep 05 j 18:39	5°♐44'35	1°33'56
conjunction	-696 Aug 19 j 03:15	18°♏16'32	1°08'50	minimum elong	-688 Sep 05 j 18:39	5°♐44'35	1°33'57
minimum elong	-696 Aug 19 j 03:15	18°♏16'32	1°08'51	max. Earth dist.	-688 Sep 04 j 18:28	5°♐42'20	31.29564 AU
retrograde	-696 Nov 29 j 11:43	20°♏43'14		retrograde	-688 Dec 16 j 21:12	8°♐10'59	
opposition	-695 Feb 14 j 18:24	19°♏21'17	1°15'24	opposition	-687 Mar 04 j 10:11	6°♐49'17	1°41'42
min. Earth dist.	-695 Feb 15 j 16:57	19°♏19'43	29.23878 AU	min. Earth dist.	-687 Mar 05 j 08:19	6°♐47'46	29.29916 AU
direct	-695 May 06 j 16:19	17°♏56'00		direct	-687 May 24 j 15:45	5°♐24'19	
				max. Earth dist.	-687 Sep 07 j 05:07	7°♐53'15	31.30015 AU
conjunction	-695 Aug 21 j 14:26	20°♏27'35	1°12'23				
minimum elong	-695 Aug 21 j 14:25	20°♏27'35	1°12'22	conjunction	-687 Sep 08 j 05:21	7°♐55'31	1°36'31
max. Earth dist.	-695 Aug 20 j 14:35	20°♏25'22	31.24127 AU	minimum elong	-687 Sep 08 j 05:21	7°♐55'31	1°36'30
retrograde	-695 Dec 01 j 20:11	22°♏54'13		retrograde	-687 Dec 19 j 07:14	10°♐21'52	
opposition	-694 Feb 17 j 05:02	21°♏32'17	1°19'08	opposition	-686 Mar 06 j 21:23	9°♐00'09	1°44'23
min. Earth dist.	-694 Feb 18 j 02:50	21°♏30'46	29.24550 AU	min. Earth dist.	-686 Mar 07 j 20:30	8°♐58'34	29.30319 AU
direct	-694 May 09 j 05:10	20°♏07'01		direct	-686 May 27 j 03:07	7°♐35'11	
max. Earth dist.	-694 Aug 23 j 01:06	22°♏36'16	31.24845 AU				
				conjunction	-686 Sep 10 j 15:57	10°♐06'18	1°38'56
conjunction	-694 Aug 24 j 01:30	22°♏38'33	1°15'49	minimum elong	-686 Sep 10 j 15:57	10°♐06'17	1°38'57
minimum elong	-694 Aug 24 j 01:29	22°♏38'33	1°15'50	max. Earth dist.	-686 Sep 09 j 15:57	10°♐04'03	31.30357 AU
retrograde	-694 Dec 04 j 05:52	25°♏05'07		retrograde	-686 Dec 21 j 15:38	12°♐32'35	
opposition	-693 Feb 19 j 15:53	23°♏43'12	1°22'44	opposition	-685 Mar 09 j 08:38	11°♐10'51	1°46'54
min. Earth dist.	-693 Feb 20 j 13:52	23°♏41'41	29.25330 AU	min. Earth dist.	-685 Mar 10 j 07:10	11°♐09'18	29.30600 AU
direct	-693 May 11 j 14:55	22°♏17'58		direct	-685 May 29 j 16:24	9°♐45'53	
				max. Earth dist.	-685 Sep 12 j 01:41	12°♐14'35	31.30595 AU
conjunction	-693 Aug 26 j 12:34	24°♏49'28	1°19'08				
minimum elong	-693 Aug 26 j 12:34	24°♏49'28	1°19'08	conjunction	-685 Sep 13 j 02:17	12°♐16'53	1°41'14
max. Earth dist.	-693 Aug 25 j 13:15	24°♏47'18	31.25664 AU	minimum elong	-685 Sep 13 j 02:17	12°♐16'53	1°41'13
retrograde	-693 Dec 06 j 14:59	27°♏16'00		retrograde	-685 Dec 24 j 01:07	14°♐43'08	
opposition	-692 Feb 22 j 02:45	25°♏54'09	1°26'14	opposition	-684 Mar 10 j 19:56	13°♐21'22	1°49'16
min. Earth dist.	-692 Feb 23 j 00:45	25°♏52'38	29.26178 AU	min. Earth dist.	-684 Mar 11 j 18:38	13°♐19'48	29.30825 AU
direct	-692 May 13 j 02:23	24°♏28'58		direct	-684 May 31 j 02:47	11°♐56'23	
conjunction	-692 Aug 27 j 23:27	27°♏00'26	1°22'21	conjunction	-684 Sep 14 j 12:35	14°♐27'17	1°43'22
minimum elong	-692 Aug 27 j 23:27	27°♏00'25	1°22'22	minimum elong	-684 Sep 14 j 12:35	14°♐27'17	1°43'23
max. Earth dist.	-692 Aug 26 j 23:15	26°♏58'10	31.26541 AU	max. Earth dist.	-684 Sep 13 j 13:15	14°♐25'06	31.30805 AU
retrograde	-692 Dec 08 j 02:28	29°♏26'56		retrograde	-684 Dec 25 j 09:39	16°♐53'30	
opposition	-691 Feb 23 j 13:40	28°♏05'08	1°29'36	opposition	-683 Mar 13 j 07:18	15°♐31'41	1°51'29
min. Earth dist.	-691 Feb 24 j 11:15	28°♏03'39	29.27078 AU	min. Earth dist.	-683 Mar 14 j 05:49	15°♐30'08	29.31037 AU
direct	-691 May 15 j 12:47	26°♏40'01		direct	-683 Jun 02 j 14:39	14°♐06'42	
max. Earth dist.	-691 Aug 29 j 11:16	29°♏09'18	31.27424 AU				
				conjunction	-683 Sep 16 j 22:31	16°♐37'29	1°45'22
conjunction	-691 Aug 30 j 10:19	29°♏11'26	1°25'26	minimum elong	-683 Sep 16 j 22:31	16°♐37'29	1°45'21
minimum elong	-691 Aug 30 j 10:19	29°♏11'26	1°25'26	max. Earth dist.	-683 Sep 15 j 22:39	16°♐35'15	31.31037 AU
	-691 Sep 21 j 12:22	0°♐		retrograde	-683 Dec 27 j 20:26	19°♐03'42	
retrograde	-691 Dec 10 j 12:41	1°♐37'56		opposition	-682 Mar 15 j 18:34	17°♐41'51	1°53'32
opposition	-690 Feb 26 j 00:45	0°♐16'10	1°32'50	min. Earth dist.	-682 Mar 16 j 16:10	17°♐40'22	29.31312 AU
min. Earth dist.	-690 Feb 26 j 23:09	0°♐14'38	29.27940 AU	direct	-682 Jun 05 j 01:14	16°♐16'53	
	-690 Mar 07 j 21:08	30°♐♏		max. Earth dist.	-682 Sep 18 j 10:21	18°♐45'31	31.31343 AU
direct	-690 May 18 j 01:52	28°♏51'07					
	-690 Jul 24 j 20:23	0°♐		conjunction	-682 Sep 19 j 08:36	18°♐47'35	1°47'12
				minimum elong	-682 Sep 19 j 08:36	18°♐47'35	1°47'12
conjunction	-690 Sep 01 j 21:07	1°♐22'30	1°28'24	retrograde	-682 Dec 30 j 05:54	21°♐13'48	
minimum elong	-690 Sep 01 j 21:07	1°♐22'30	1°28'25	opposition	-681 Mar 18 j 05:55	19°♐51'57	1°55'25
max. Earth dist.	-690 Aug 31 j 20:54	1°♐20'15	31.28250 AU	min. Earth dist.	-681 Mar 19 j 03:42	19°♐50'28	29.31667 AU
retrograde	-690 Dec 13 j 00:25	3°♐48'58		direct	-681 Jun 07 j 13:20	18°♐27'02	
opposition	-689 Feb 28 j 11:40	2°♐27'14	1°35'56				
min. Earth dist.	-689 Mar 01 j 09:22	2°♐25'45	29.28725 AU	conjunction	-681 Sep 21 j 18:29	20°♐57'40	1°48'54
direct	-689 May 20 j 13:58	1°♐02'13		minimum elong	-681 Sep 21 j 18:29	20°♐57'40	1°48'53
max. Earth dist.	-689 Sep 03 j 08:24	3°♐31'22	31.28967 AU	max. Earth dist.	-681 Sep 20 j 19:53	20°♐55'33	31.31757 AU
				retrograde	-680 Jan 01 j 17:32	23°♐23'55	
conjunction	-689 Sep 04 j 08:03	3°♐33'34	1°31'14	opposition	-680 Mar 19 j 17:19	22°♐02'04	1°57'08
minimum elong	-689 Sep 04 j 08:03	3°♐33'34	1°31'13	min. Earth dist.	-680 Mar 20 j 13:32	22°♐00'41	29.32129 AU

Attention, astronomical year style is used: The year -680 in astronomical counting style is the year 681 BCE in historical counting style.

direct	-680 Jun 09 j 00:27	20° 17 37'13		direct	-672 Jun 26 j 21:52	8° 02 09	
max. Earth dist.	-680 Sep 22 j 06:57	23° 10 05'49	31.32251 AU				
conjunction	-680 Sep 23 j 04:17	23° 10 07'49	1°50'26	conjunction	-672 Oct 10 j 09:56	10° 03 32'07	1°56'54
minimum elong	-680 Sep 23 j 04:17	23° 10 07'49	1°50'26	minimum elong	-672 Oct 10 j 09:56	10° 03 32'07	1°56'54
retrograde	-679 Jan 03 j 03:28	25° 10 34'07		max. Earth dist.	-672 Oct 09 j 14:49	10° 03 30'20	31.34012 AU
opposition	-679 Mar 22 j 04:55	24° 10 12'18	1°58'42	retrograde	-671 Jan 20 j 13:13	12° 03 58'50	
min. Earth dist.	-679 Mar 23 j 01:43	24° 10 10'53	29.32655 AU	opposition	-671 Apr 09 j 03:39	11° 03 36'55	2°04'55
direct	-679 Jun 11 j 11:51	22° 10 47'33		min. Earth dist.	-671 Apr 09 j 21:00	11° 03 35'44	29.34037 AU
				direct	-671 Jun 29 j 08:37	10° 03 12'33	
conjunction	-679 Sep 25 j 14:04	25° 10 18'05	1°51'48	conjunction	-671 Oct 12 j 19:23	12° 03 42'25	1°56'58
minimum elong	-679 Sep 25 j 14:04	25° 10 18'05	1°51'48	minimum elong	-671 Oct 12 j 19:23	12° 03 42'25	1°56'57
max. Earth dist.	-679 Sep 24 j 16:57	25° 10 16'06	31.32795 AU	max. Earth dist.	-671 Oct 12 j 01:27	12° 03 40'44	31.33782 AU
retrograde	-678 Jan 05 j 14:54	27° 10 44'26		retrograde	-670 Jan 22 j 23:13	15° 03 09'09	
opposition	-678 Mar 24 j 16:17	26° 10 22'40	2°00'05	opposition	-670 Apr 11 j 15:36	13° 03 47'10	2°04'54
min. Earth dist.	-678 Mar 25 j 11:50	26° 10 21'20	29.33191 AU	min. Earth dist.	-670 Apr 12 j 09:23	13° 03 45'58	29.33820 AU
direct	-678 Jun 14 j 01:04	24° 10 58'00		direct	-670 Jul 01 j 20:29	12° 03 22'49	
				max. Earth dist.	-670 Oct 14 j 11:25	14° 03 50'56	31.33592 AU
conjunction	-678 Sep 27 j 23:57	27° 10 28'30	1°53'01	conjunction	-670 Oct 15 j 04:41	14° 03 52'34	1°56'52
minimum elong	-678 Sep 27 j 23:57	27° 10 28'30	1°53'02	minimum elong	-670 Oct 15 j 04:41	14° 03 52'34	1°56'52
max. Earth dist.	-678 Sep 27 j 03:07	27° 10 26'34	31.33307 AU	retrograde	-669 Jan 25 j 10:44	17° 03 19'20	
retrograde	-677 Jan 08 j 01:51	29° 10 54'55		opposition	-669 Apr 14 j 03:37	15° 03 57'18	2°04'43
opposition	-677 Mar 27 j 04:04	28° 10 33'11	2°01'18	min. Earth dist.	-669 Apr 14 j 19:35	15° 03 56'13	29.33654 AU
min. Earth dist.	-677 Mar 28 j 00:10	28° 10 31'49	29.33682 AU	direct	-669 Jul 04 j 09:52	14° 03 32'59	
direct	-677 Jun 16 j 12:13	27° 10 08'36					
conjunction	-677 Sep 30 j 09:43	29° 10 39'04	1°54'05	conjunction	-669 Oct 17 j 13:52	17° 03 02'37	1°56'37
minimum elong	-677 Sep 30 j 09:43	29° 10 39'04	1°54'04	minimum elong	-669 Oct 17 j 13:52	17° 03 02'37	1°56'36
max. Earth dist.	-677 Sep 29 j 13:40	29° 10 37'11	31.33753 AU	max. Earth dist.	-669 Oct 16 j 21:19	17° 03 01'04	31.33462 AU
	-677 Oct 09 j 17:44	0° 03		retrograde	-668 Jan 27 j 21:43	19° 03 29'29	
retrograde	-676 Jan 10 j 10:40	2° 03 05'32		opposition	-668 Apr 15 j 15:51	18° 03 07'23	2°04'21
opposition	-676 Mar 28 j 15:54	0° 03 43'49	2°02'20	min. Earth dist.	-668 Apr 16 j 07:40	18° 03 06'19	29.33575 AU
min. Earth dist.	-676 Mar 29 j 11:09	0° 03 42'30	29.34066 AU	direct	-668 Jul 05 j 20:58	16° 03 43'07	
	-676 Apr 25 j 21:54	30° 03					
direct	-676 Jun 18 j 01:07	29° 10 19'19		conjunction	-668 Oct 18 j 23:08	19° 03 12'41	1°56'11
	-676 Aug 08 j 00:08	0° 03		minimum elong	-668 Oct 18 j 23:08	19° 03 12'41	1°56'11
				max. Earth dist.	-668 Oct 18 j 08:02	19° 03 11'16	31.33427 AU
conjunction	-676 Oct 01 j 19:29	1° 03 49'43	1°54'58	retrograde	-667 Jan 29 j 06:53	21° 03 39'37	
minimum elong	-676 Oct 01 j 19:29	1° 03 49'43	1°54'59	opposition	-667 Apr 18 j 03:53	20° 03 17'31	2°03'48
max. Earth dist.	-676 Sep 30 j 22:52	1° 03 47'47	31.34075 AU	min. Earth dist.	-667 Apr 18 j 18:18	20° 03 16'33	29.33558 AU
retrograde	-675 Jan 11 j 20:51	4° 03 16'15		direct	-667 Jul 08 j 09:45	18° 03 53'19	
opposition	-675 Mar 31 j 03:46	2° 03 54'32	2°03'12				
min. Earth dist.	-675 Mar 31 j 23:03	2° 03 53'13	29.34336 AU	conjunction	-667 Oct 21 j 08:13	21° 03 22'49	1°55'35
direct	-675 Jun 20 j 11:25	1° 03 30'05		minimum elong	-667 Oct 21 j 08:13	21° 03 22'49	1°55'34
max. Earth dist.	-675 Oct 03 j 09:51	3° 03 58'35	31.34266 AU	max. Earth dist.	-667 Oct 20 j 17:02	21° 03 21'23	31.33435 AU
				retrograde	-666 Jan 31 j 17:48	23° 03 49'51	
conjunction	-675 Oct 04 j 05:16	4° 03 00'25	1°55'42	opposition	-666 Apr 20 j 16:05	22° 03 27'44	2°03'05
minimum elong	-675 Oct 04 j 05:16	4° 03 00'25	1°55'41	min. Earth dist.	-666 Apr 21 j 05:58	22° 03 26'48	29.33578 AU
retrograde	-674 Jan 14 j 05:53	6° 03 27'00		direct	-666 Jul 10 j 20:33	21° 03 03'37	
opposition	-674 Apr 02 j 15:43	5° 03 05'16	2°03'53				
min. Earth dist.	-674 Apr 03 j 10:59	5° 03 03'57	29.34441 AU	conjunction	-666 Oct 23 j 17:28	23° 03 33'03	1°54'49
direct	-674 Jun 22 j 23:25	3° 03 40'52		minimum elong	-666 Oct 23 j 17:28	23° 03 33'03	1°54'49
				max. Earth dist.	-666 Oct 23 j 04:03	23° 03 31'47	31.33446 AU
conjunction	-674 Oct 06 j 14:54	6° 03 11'05	1°56'16	retrograde	-665 Feb 03 j 03:10	26° 03 00'12	
minimum elong	-674 Oct 06 j 14:54	6° 03 11'05	1°56'16	opposition	-665 Apr 23 j 04:23	24° 03 38'05	2°02'10
max. Earth dist.	-674 Oct 05 j 18:41	6° 03 09'11	31.34299 AU	min. Earth dist.	-665 Apr 23 j 17:51	24° 03 37'11	29.33559 AU
retrograde	-673 Jan 16 j 16:39	8° 03 37'43		direct	-665 Jul 13 j 08:45	23° 03 14'04	
opposition	-673 Apr 05 j 03:35	7° 03 15'56	2°04'24				
min. Earth dist.	-673 Apr 05 j 22:07	7° 03 14'41	29.34407 AU	conjunction	-665 Oct 26 j 02:35	25° 03 43'25	1°53'53
direct	-673 Jun 25 j 10:14	5° 03 51'34		minimum elong	-665 Oct 26 j 02:35	25° 03 43'25	1°53'52
max. Earth dist.	-673 Oct 08 j 05:48	8° 03 19'54	31.34199 AU	max. Earth dist.	-665 Oct 25 j 12:49	25° 03 42'07	31.33408 AU
				retrograde	-664 Feb 05 j 14:26	28° 03 10'41	
conjunction	-673 Oct 09 j 00:38	8° 03 21'40	1°56'40	opposition	-664 Apr 24 j 16:47	26° 03 48'34	2°01'05
minimum elong	-673 Oct 09 j 00:38	8° 03 21'40	1°56'39	min. Earth dist.	-664 Apr 25 j 05:07	26° 03 47'44	29.33483 AU
retrograde	-672 Jan 19 j 01:59	10° 03 48'20		direct	-664 Jul 14 j 19:01	25° 03 24'37	
opposition	-672 Apr 06 j 15:42	9° 03 26'30	2°04'45				
min. Earth dist.	-672 Apr 07 j 10:35	9° 03 25'13	29.34251 AU	conjunction	-664 Oct 27 j 11:48	27° 03 53'55	1°52'48

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Attention, astronomical year style is used: The year -664 in astronomical counting style is the year 665 BCE in historical counting style.

minimum elong	-664 Oct 27 j 11:48	27° \mathbb{A} 53'55	1°52'48	min. Earth dist.	-656 May 13 j 04:28	14° \mathbb{M} 13'03	29.28820 AU
max. Earth dist.	-664 Oct 26 j 23:36	27° \mathbb{A} 52'46	31.33273 AU	direct	-656 Aug 01 j 17:30	12° \mathbb{M} 49'50	
	-663 Jan 02 j 07:19	0° \mathbb{M}			-656 Nov 05 j 09:06	15° \mathbb{M}	
retrograde	-663 Feb 07 j 00:12	0° \mathbb{M} 21'19					
	-663 Mar 15 j 23:29	30° \mathbb{R} \mathbb{A}		conjunction	-656 Nov 13 j 12:28	15° \mathbb{M} 18'25	1°38'29
opposition	-663 Apr 27 j 05:21	28° \mathbb{A} 59'11	1°59'50	minimum elong	-656 Nov 13 j 12:29	15° \mathbb{M} 18'25	1°38'29
min. Earth dist.	-663 Apr 27 j 17:58	28° \mathbb{A} 58'20	29.33282 AU	max. Earth dist.	-656 Nov 13 j 05:27	15° \mathbb{M} 17'45	31.28430 AU
direct	-663 Jul 17 j 06:03	27° \mathbb{A} 35'18		retrograde	-655 Feb 24 j 15:56	17° \mathbb{M} 46'43	
	-663 Oct 27 j 21:05	0° \mathbb{M}		opposition	-655 May 15 j 10:00	16° \mathbb{M} 24'03	1°43'55
				min. Earth dist.	-655 May 15 j 15:26	16° \mathbb{M} 23'41	29.28240 AU
conjunction	-663 Oct 29 j 21:02	0° \mathbb{M} 04'31	1°51'32	direct	-655 Aug 04 j 03:55	15° \mathbb{M} 00'24	
minimum elong	-663 Oct 29 j 21:02	0° \mathbb{M} 04'31	1°51'31				
max. Earth dist.	-663 Oct 29 j 08:30	0° \mathbb{M} 03'20	31.33010 AU	conjunction	-655 Nov 15 j 21:31	17° \mathbb{M} 28'56	1°36'02
retrograde	-662 Feb 09 j 11:59	2° \mathbb{M} 32'03		minimum elong	-655 Nov 15 j 21:31	17° \mathbb{M} 28'56	1°36'01
opposition	-662 Apr 29 j 17:40	1° \mathbb{M} 09'52	1°58'25	max. Earth dist.	-655 Nov 15 j 16:23	17° \mathbb{M} 28'27	31.27883 AU
min. Earth dist.	-662 Apr 30 j 04:50	1° \mathbb{M} 09'07	29.32937 AU	retrograde	-654 Feb 27 j 01:16	19° \mathbb{M} 57'22	
	-662 Jun 19 j 17:00	30° \mathbb{R} \mathbb{A}		opposition	-654 May 17 j 22:37	18° \mathbb{M} 34'40	1°41'13
direct	-662 Jul 19 j 16:21	29° \mathbb{A} 46'03		min. Earth dist.	-654 May 18 j 03:49	18° \mathbb{M} 34'19	29.27716 AU
	-662 Aug 18 j 01:57	0° \mathbb{M}		direct	-654 Aug 06 j 14:44	17° \mathbb{M} 11'06	
conjunction	-662 Nov 01 j 06:22	2° \mathbb{M} 15'12	1°50'08	conjunction	-654 Nov 18 j 06:27	19° \mathbb{M} 39'33	1°33'26
minimum elong	-662 Nov 01 j 06:22	2° \mathbb{M} 15'12	1°50'08	minimum elong	-654 Nov 18 j 06:28	19° \mathbb{M} 39'33	1°33'26
max. Earth dist.	-662 Oct 31 j 18:40	2° \mathbb{M} 14'05	31.32583 AU	max. Earth dist.	-654 Nov 18 j 01:43	19° \mathbb{M} 39'06	31.27397 AU
retrograde	-661 Feb 11 j 22:55	4° \mathbb{M} 42'50		retrograde	-653 Mar 01 j 13:20	22° \mathbb{M} 08'09	
opposition	-661 May 02 j 06:24	3° \mathbb{M} 20'37	1°56'49	opposition	-653 May 20 j 11:19	20° \mathbb{M} 45'25	1°38'23
min. Earth dist.	-661 May 02 j 18:08	3° \mathbb{M} 19'49	29.32432 AU	min. Earth dist.	-653 May 20 j 14:32	20° \mathbb{M} 45'12	29.27231 AU
direct	-661 Jul 22 j 03:55	1° \mathbb{M} 56'50		direct	-653 Aug 09 j 00:45	19° \mathbb{M} 21'55	
conjunction	-661 Nov 03 j 15:31	4° \mathbb{M} 25'53	1°48'34	conjunction	-653 Nov 20 j 15:25	21° \mathbb{M} 50'19	1°30'42
minimum elong	-661 Nov 03 j 15:31	4° \mathbb{M} 25'53	1°48'33	minimum elong	-653 Nov 20 j 15:25	21° \mathbb{M} 50'19	1°30'41
max. Earth dist.	-661 Nov 03 j 04:24	4° \mathbb{M} 24'50	31.32014 AU	max. Earth dist.	-653 Nov 20 j 11:51	21° \mathbb{M} 49'59	31.26909 AU
retrograde	-660 Feb 14 j 11:04	6° \mathbb{M} 53'38		retrograde	-652 Mar 03 j 00:35	24° \mathbb{M} 19'06	
opposition	-660 May 03 j 19:00	5° \mathbb{M} 31'20	1°55'04	opposition	-652 May 22 j 00:17	22° \mathbb{M} 56'19	1°35'23
min. Earth dist.	-660 May 04 j 05:10	5° \mathbb{M} 30'39	29.31782 AU	min. Earth dist.	-652 May 22 j 03:42	22° \mathbb{M} 56'05	29.26731 AU
direct	-660 Jul 23 j 16:57	4° \mathbb{M} 07'34		direct	-652 Aug 10 j 11:31	21° \mathbb{M} 32'53	
conjunction	-660 Nov 05 j 00:40	6° \mathbb{M} 36'32	1°46'50	conjunction	-652 Nov 22 j 00:33	24° \mathbb{M} 01'14	1°27'51
minimum elong	-660 Nov 05 j 00:41	6° \mathbb{M} 36'32	1°46'51	minimum elong	-652 Nov 22 j 00:34	24° \mathbb{M} 01'14	1°27'51
max. Earth dist.	-660 Nov 04 j 13:51	6° \mathbb{M} 35'31	31.31309 AU	max. Earth dist.	-652 Nov 21 j 22:00	24° \mathbb{M} 00'59	31.26395 AU
retrograde	-659 Feb 15 j 22:37	9° \mathbb{M} 04'23		retrograde	-651 Mar 05 j 13:07	26° \mathbb{M} 30'09	
opposition	-659 May 06 j 07:34	7° \mathbb{M} 41'59	1°53'09	opposition	-651 May 24 j 12:56	25° \mathbb{M} 07'20	1°32'16
min. Earth dist.	-659 May 06 j 17:55	7° \mathbb{M} 41'18	29.31040 AU	min. Earth dist.	-651 May 24 j 14:43	25° \mathbb{M} 07'13	29.26172 AU
direct	-659 Jul 26 j 03:53	6° \mathbb{M} 18'14		direct	-651 Aug 12 j 23:00	23° \mathbb{M} 43'57	
conjunction	-659 Nov 07 j 09:46	8° \mathbb{M} 47'06	1°44'58	conjunction	-651 Nov 24 j 09:43	26° \mathbb{M} 12'16	1°24'51
minimum elong	-659 Nov 07 j 09:47	8° \mathbb{M} 47'06	1°44'57	minimum elong	-651 Nov 24 j 09:43	26° \mathbb{M} 12'16	1°24'50
max. Earth dist.	-659 Nov 07 j 00:26	8° \mathbb{M} 46'13	31.30544 AU	max. Earth dist.	-651 Nov 24 j 07:19	26° \mathbb{M} 12'02	31.25788 AU
retrograde	-658 Feb 18 j 08:08	11° \mathbb{M} 15'02		retrograde	-650 Mar 08 j 01:28	28° \mathbb{M} 41'21	
opposition	-658 May 08 j 20:07	9° \mathbb{M} 52'33	1°51'05	opposition	-650 May 27 j 01:55	27° \mathbb{M} 18'29	1°29'00
min. Earth dist.	-658 May 09 j 05:00	9° \mathbb{M} 51'57	29.30249 AU	min. Earth dist.	-650 May 27 j 03:51	27° \mathbb{M} 18'21	29.25514 AU
direct	-658 Jul 28 j 17:14	8° \mathbb{M} 28'48		direct	-650 Aug 15 j 08:57	25° \mathbb{M} 55'08	
conjunction	-658 Nov 09 j 18:37	10° \mathbb{M} 57'34	1°42'57	conjunction	-650 Nov 26 j 18:57	28° \mathbb{M} 23'23	1°21'44
minimum elong	-658 Nov 09 j 18:38	10° \mathbb{M} 57'34	1°42'57	minimum elong	-650 Nov 26 j 18:57	28° \mathbb{M} 23'23	1°21'44
max. Earth dist.	-658 Nov 09 j 09:19	10° \mathbb{M} 56'41	31.29765 AU	max. Earth dist.	-650 Nov 26 j 17:58	28° \mathbb{M} 23'17	31.25071 AU
retrograde	-657 Feb 20 j 19:26	13° \mathbb{M} 25'36			-649 Jan 12 j 00:45	0° \mathbb{A}	
opposition	-657 May 11 j 08:45	12° \mathbb{M} 03'03	1°48'51	retrograde	-649 Mar 10 j 12:29	0° \mathbb{A} 52'36	
min. Earth dist.	-657 May 11 j 16:46	12° \mathbb{M} 02'30	29.29499 AU		-649 May 10 j 10:02	30° \mathbb{R} \mathbb{M}	
direct	-657 Jul 31 j 04:53	10° \mathbb{M} 39'19		opposition	-649 May 29 j 14:52	29° \mathbb{M} 29'40	1°25'36
				min. Earth dist.	-649 May 29 j 15:32	29° \mathbb{M} 29'38	29.24717 AU
conjunction	-657 Nov 12 j 03:40	13° \mathbb{M} 07'59	1°40'48	direct	-649 Aug 17 j 22:24	28° \mathbb{M} 06'22	
minimum elong	-657 Nov 12 j 03:41	13° \mathbb{M} 07'59	1°40'46		-649 Nov 13 j 20:07	0° \mathbb{A}	
max. Earth dist.	-657 Nov 11 j 20:31	13° \mathbb{M} 07'19	31.29051 AU				
	-656 Jan 07 j 03:30	15° \mathbb{M}		conjunction	-649 Nov 29 j 04:11	0° \mathbb{A} 34'32	1°18'30
retrograde	-656 Feb 23 j 05:06	15° \mathbb{M} 36'09		minimum elong	-649 Nov 29 j 04:11	0° \mathbb{A} 34'32	1°18'29
	-656 Apr 12 j 09:54	15° \mathbb{R} \mathbb{M}		max. Earth dist.	-649 Nov 29 j 02:47	0° \mathbb{A} 34'24	31.24217 AU
opposition	-656 May 12 j 21:25	14° \mathbb{M} 13'31	1°46'28	retrograde	-648 Mar 12 j 01:30	3° \mathbb{A} 03'53	

Attention, astronomical year style is used: The year -648 in astronomical counting style is the year 649 BCE in historical counting style.

opposition	-648 May 31 j 03:52	1°♂40'52	1°22'06	conjunction	-640 Dec 17 j 15:30	20°♂15'03	0°44'56
min. Earth dist.	-648 May 31 j 04:03	1°♂40'51	29.23802 AU	minimum elong	-640 Dec 17 j 15:30	20°♂15'03	0°44'56
direct	-648 Aug 19 j 09:57	0°♂17'35		max. Earth dist.	-640 Dec 17 j 22:54	20°♂15'45	31.16149 AU
				retrograde	-639 Apr 01 j 12:02	22°♂45'50	
conjunction	-648 Nov 30 j 13:29	2°♂45'40	1°15'10	opposition	-639 Jun 21 j 00:24	21°♂22'15	0°45'46
minimum elong	-648 Nov 30 j 13:29	2°♂45'40	1°15'10	min. Earth dist.	-639 Jun 20 j 15:50	21°♂22'49	29.15817 AU
max. Earth dist.	-648 Nov 30 j 13:49	2°♂45'42	31.23242 AU	direct	-639 Sep 08 j 14:16	19°♂59'15	
retrograde	-647 Mar 14 j 11:39	5°♂15'08					
opposition	-647 Jun 02 j 16:50	3°♂52'01	1°18'28	conjunction	-639 Dec 20 j 01:11	22°♂26'59	0°40'47
min. Earth dist.	-647 Jun 02 j 16:29	3°♂52'03	29.22762 AU	minimum elong	-639 Dec 20 j 01:11	22°♂26'59	0°40'45
direct	-647 Aug 21 j 22:53	2°♂28'44		max. Earth dist.	-639 Dec 20 j 10:22	22°♂27'51	31.15421 AU
				retrograde	-638 Apr 03 j 23:16	24°♂57'57	
conjunction	-647 Dec 02 j 22:37	4°♂56'43	1°11'43	opposition	-638 Jun 23 j 13:28	23°♂34'21	0°41'18
minimum elong	-647 Dec 02 j 22:37	4°♂56'43	1°11'41	min. Earth dist.	-638 Jun 23 j 04:25	23°♂34'57	29.15045 AU
max. Earth dist.	-647 Dec 02 j 22:50	4°♂56'45	31.22180 AU	direct	-638 Sep 11 j 02:27	22°♂11'25	
retrograde	-646 Mar 16 j 23:01	7°♂26'19					
opposition	-646 Jun 05 j 05:39	6°♂03'06	1°14'44	conjunction	-638 Dec 22 j 10:54	24°♂39'08	0°36'34
min. Earth dist.	-646 Jun 05 j 03:59	6°♂03'12	29.21678 AU	minimum elong	-638 Dec 22 j 10:54	24°♂39'08	0°36'34
direct	-646 Aug 24 j 10:02	4°♂39'47		max. Earth dist.	-638 Dec 22 j 19:49	24°♂39'58	31.14615 AU
				retrograde	-637 Apr 06 j 12:13	27°♂10'17	
conjunction	-646 Dec 05 j 07:52	7°♂07'42	1°08'10	opposition	-637 Jun 26 j 02:40	25°♂46'37	0°36'46
minimum elong	-646 Dec 05 j 07:52	7°♂07'42	1°08'09	min. Earth dist.	-637 Jun 25 j 16:32	25°♂47'18	29.14184 AU
max. Earth dist.	-646 Dec 05 j 09:51	7°♂07'53	31.21091 AU	direct	-637 Sep 13 j 13:47	24°♂23'43	
retrograde	-645 Mar 19 j 08:42	9°♂37'26					
opposition	-645 Jun 07 j 18:42	8°♂14'06	1°10'53	conjunction	-637 Dec 24 j 20:46	26°♂51'25	0°32'18
min. Earth dist.	-645 Jun 07 j 16:44	8°♂14'14	29.20603 AU	minimum elong	-637 Dec 24 j 20:46	26°♂51'25	0°32'17
direct	-645 Aug 26 j 21:43	6°♂50'49		max. Earth dist.	-637 Dec 25 j 06:54	26°♂52'23	31.13681 AU
				retrograde	-636 Apr 07 j 23:16	29°♂22'44	
conjunction	-645 Dec 07 j 16:55	9°♂18'38	1°04'31	opposition	-636 Jun 27 j 15:57	27°♂59'01	0°32'10
minimum elong	-645 Dec 07 j 16:55	9°♂18'38	1°04'30	min. Earth dist.	-636 Jun 27 j 06:04	27°♂59'41	29.13180 AU
max. Earth dist.	-645 Dec 07 j 19:34	9°♂18'53	31.20060 AU	direct	-636 Sep 15 j 02:08	26°♂36'08	
retrograde	-644 Mar 20 j 20:47	11°♂48'30					
opposition	-644 Jun 09 j 07:36	10°♂25'06	1°06'56	conjunction	-636 Dec 26 j 06:45	29°♂03'47	0°27'59
min. Earth dist.	-644 Jun 09 j 03:26	10°♂25'23	29.19610 AU	minimum elong	-636 Dec 26 j 06:45	29°♂03'47	0°27'59
direct	-644 Aug 28 j 08:25	9°♂01'49		max. Earth dist.	-636 Dec 26 j 16:59	29°♂04'45	31.12621 AU
					-635 Jan 20 j 13:25	0°♂	
conjunction	-644 Dec 09 j 02:11	11°♂29'35	1°00'47	retrograde	-635 Apr 10 j 12:05	1°♂35'15	
minimum elong	-644 Dec 09 j 02:11	11°♂29'36	1°00'47	opposition	-635 Jun 30 j 04:52	0°♂11'26	0°27'32
max. Earth dist.	-644 Dec 09 j 06:00	11°♂29'57	31.19111 AU	min. Earth dist.	-635 Jun 29 j 17:29	0°♂12'12	29.12051 AU
retrograde	-643 Mar 23 j 07:51	13°♂59'38			-635 Jul 07 j 06:10	30°♂	
opposition	-643 Jun 11 j 20:27	12°♂36'10	1°02'53	direct	-635 Sep 17 j 13:38	28°♂48'32	
min. Earth dist.	-643 Jun 11 j 16:14	12°♂36'27	29.18716 AU		-635 Nov 23 j 13:47	0°♂	
direct	-643 Aug 30 j 18:42	11°♂12'55					
				conjunction	-635 Dec 28 j 16:42	1°♂16'09	0°23'37
conjunction	-643 Dec 11 j 11:29	13°♂40'39	0°56'56	minimum elong	-635 Dec 28 j 16:42	1°♂16'09	0°23'36
minimum elong	-643 Dec 11 j 11:29	13°♂40'39	0°56'56	max. Earth dist.	-635 Dec 29 j 03:27	1°♂17'10	31.11435 AU
max. Earth dist.	-643 Dec 11 j 16:44	13°♂41'09	31.18278 AU	retrograde	-634 Apr 12 j 22:31	3°♂47'44	
retrograde	-642 Mar 25 j 20:24	16°♂10'52		opposition	-634 Jul 02 j 18:04	2°♂23'49	0°22'51
opposition	-642 Jun 14 j 09:18	14°♂47'21	0°58'44	min. Earth dist.	-634 Jul 02 j 07:07	2°♂24'34	29.10828 AU
min. Earth dist.	-642 Jun 14 j 03:00	14°♂47'47	29.17918 AU	direct	-634 Sep 20 j 00:24	1°♂00'54	
direct	-642 Sep 02 j 05:32	13°♂24'10					
				conjunction	-634 Dec 31 j 02:34	3°♂28'27	0°19'14
conjunction	-642 Dec 13 j 20:38	15°♂51'54	0°53'01	minimum elong	-634 Dec 31 j 02:34	3°♂28'27	0°19'14
minimum elong	-642 Dec 13 j 20:38	15°♂51'54	0°53'01	max. Earth dist.	-634 Dec 31 j 14:36	3°♂29'35	31.10199 AU
max. Earth dist.	-642 Dec 14 j 02:22	15°♂52'26	31.17522 AU	retrograde	-633 Apr 15 j 10:20	6°♂00'09	
retrograde	-641 Mar 28 j 09:13	18°♂22'18		opposition	-633 Jul 05 j 07:05	4°♂36'07	0°18'08
opposition	-641 Jun 16 j 22:24	16°♂58'45	0°54'30	min. Earth dist.	-633 Jul 04 j 18:21	4°♂36'59	29.09582 AU
min. Earth dist.	-641 Jun 16 j 15:53	16°♂59'12	29.17199 AU	direct	-633 Sep 22 j 11:36	3°♂13'10	
direct	-641 Sep 04 j 14:39	15°♂35'38					
				conjunction	-632 Jan 02 j 12:28	5°♂40'40	0°14'49
conjunction	-641 Dec 16 j 06:06	18°♂03'21	0°49'01	minimum elong	-632 Jan 02 j 12:28	5°♂40'40	0°14'48
minimum elong	-641 Dec 16 j 06:06	18°♂03'21	0°49'00	behind sun begin	-632 Jan 02 j 09:45	5°♂40'25	
max. Earth dist.	-641 Dec 16 j 13:43	18°♂04'04	31.16831 AU	behind sun end	-632 Jan 02 j 15:11	5°♂40'55	
retrograde	-640 Mar 29 j 21:25	20°♂33'56		max. Earth dist.	-632 Jan 03 j 00:40	5°♂41'49	31.08964 AU
opposition	-640 Jun 18 j 11:20	19°♂10'23	0°50'10	retrograde	-632 Apr 16 j 23:00	8°♂12'30	
min. Earth dist.	-640 Jun 18 j 03:19	19°♂10'55	29.16511 AU	opposition	-632 Jul 06 j 20:05	6°♂48'22	0°13'24
direct	-640 Sep 06 j 03:19	17°♂47'20		min. Earth dist.	-632 Jul 06 j 07:22	6°♂49'14	29.08387 AU

Attention, astronomical year style is used: The year -632 in astronomical counting style is the year 633 BCE in historical counting style.

direct	-632 Sep 23 j 20:56	5° $\overline{25}$ '23		opposition	-625 Jul 23 j 14:59	22° $\overline{16}$ '44	0°-20'-2
				min. Earth dist.	-625 Jul 22 j 21:22	22° $\overline{17}$ '56	29.01982 AU
conjunction	-631 Jan 03 j 22:34	7° $\overline{52}$ '51	0°10'23	direct	-625 Oct 10 j 04:46	20° $\overline{53}$ '55	
minimum elong	-631 Jan 03 j 22:35	7° $\overline{52}$ '51	0°10'23				
behind sun begin	-631 Jan 03 j 17:29	7° $\overline{52}$ '23		conjunction	-624 Jan 19 j 23:24	23° $\overline{21}$ '30	0°-20'-57
behind sun end	-631 Jan 04 j 03:40	7° $\overline{53}$ '19		minimum elong	-624 Jan 19 j 23:24	23° $\overline{21}$ '30	0°20'58
max. Earth dist.	-631 Jan 04 j 12:37	7° $\overline{54}$ '10	31.07804 AU	max. Earth dist.	-624 Jan 20 j 18:13	23° $\overline{23}$ '17	31.01480 AU
retrograde	-631 Apr 19 j 11:13	10° $\overline{24}$ '49		retrograde	-624 May 05 j 05:58	25° $\overline{54}$ '37	
opposition	-631 Jul 09 j 08:58	9° $\overline{00}$ '35	0°08'38	min. Earth dist.	-624 Jul 24 j 09:02	24° $\overline{31}$ '25	29.00987 AU
min. Earth dist.	-631 Jul 08 j 18:41	9° $\overline{01}$ '34	29.07267 AU	opposition	-624 Jul 25 j 03:51	24° $\overline{30}$ '07	0°-24'-46
direct	-631 Sep 26 j 09:39	7° $\overline{37}$ '36		direct	-624 Oct 11 j 15:54	23° $\overline{07}$ '18	
conjunction	-630 Jan 06 j 08:31	10° $\overline{05}$ '02	0°05'57	conjunction	-623 Jan 21 j 10:21	25° $\overline{34}$ '56	0°-25'-21
minimum elong	-630 Jan 06 j 08:30	10° $\overline{05}$ '02	0°05'56	minimum elong	-623 Jan 21 j 10:20	25° $\overline{34}$ '56	0°25'22
behind sun begin	-630 Jan 06 j 02:23	10° $\overline{04}$ '29		max. Earth dist.	-623 Jan 22 j 04:35	25° $\overline{36}$ '39	31.00418 AU
behind sun end	-630 Jan 06 j 14:38	10° $\overline{05}$ '36		retrograde	-623 May 07 j 19:07	28° $\overline{08}$ '12	
max. Earth dist.	-630 Jan 06 j 22:25	10° $\overline{06}$ '21	31.06736 AU	opposition	-623 Jul 27 j 16:58	26° $\overline{43}$ '38	0°-29'-28
retrograde	-630 Apr 22 j 01:44	12° $\overline{37}$ '09		min. Earth dist.	-623 Jul 26 j 22:49	26° $\overline{44}$ '53	28.99871 AU
opposition	-630 Jul 11 j 21:56	11° $\overline{12}$ '51	0°03'52	direct	-623 Oct 14 j 01:23	25° $\overline{20}$ '48	
min. Earth dist.	-630 Jul 11 j 06:56	11° $\overline{13}$ '52	29.06258 AU				
direct	-630 Sep 28 j 19:51	9° $\overline{49}$ '52		conjunction	-622 Jan 23 j 21:22	27° $\overline{48}$ '26	0°-29'-43
				minimum elong	-622 Jan 23 j 21:22	27° $\overline{48}$ '26	0°29'45
conjunction	-629 Jan 08 j 18:44	12° $\overline{17}$ '19	0°01'27	max. Earth dist.	-622 Jan 24 j 16:52	27° $\overline{50}$ '17	30.99241 AU
minimum elong	-629 Jan 08 j 18:45	12° $\overline{17}$ '19	0°01'27		-622 Apr 03 j 12:16	0° \approx	
behind sun begin	-629 Jan 08 j 12:20	12° $\overline{16}$ '44		retrograde	-622 May 10 j 07:30	0° \approx 21'49	
behind sun end	-629 Jan 09 j 01:10	12° $\overline{17}$ '54			-622 Jun 17 j 04:07	30° \overline{R} $\overline{3}$	
max. Earth dist.	-629 Jan 09 j 10:38	12° $\overline{18}$ '49	31.05774 AU	min. Earth dist.	-622 Jul 29 j 10:46	28° $\overline{58}$ '29	28.98642 AU
retrograde	-629 Apr 24 j 13:20	14° $\overline{49}$ '35		opposition	-622 Jul 30 j 05:53	28° $\overline{57}$ '10	0°-34'-7
desc. node	-629 May 04 j 07:50	14° $\overline{48}$ '02		direct	-622 Oct 16 j 14:08	27° $\overline{34}$ '18	
opposition	-629 Jul 14 j 10:57	13° $\overline{25}$ '14	0°00'-55		-621 Jan 25 j 11:47	0° \approx	
min. Earth dist.	-629 Jul 13 j 19:08	13° $\overline{26}$ '19	29.05341 AU				
direct	-629 Oct 01 j 07:37	12° $\overline{02}$ '16		conjunction	-621 Jan 26 j 08:21	0° \approx 01'57	0°-34'-3
				minimum elong	-621 Jan 26 j 08:20	0° \approx 01'57	0°34'04
conjunction	-628 Jan 11 j 04:55	14° $\overline{29}$ '44	0°-3'-8	max. Earth dist.	-621 Jan 27 j 03:10	0° \approx 03'43	30.97989 AU
minimum elong	-628 Jan 11 j 04:54	14° $\overline{29}$ '44	0°03'10	retrograde	-621 May 12 j 22:05	2° \approx 35'27	
behind sun begin	-628 Jan 10 j 22:31	14° $\overline{29}$ '09		opposition	-621 Aug 01 j 18:49	1° \approx 10'42	0°-38'-44
behind sun end	-628 Jan 11 j 11:17	14° $\overline{30}$ '18		min. Earth dist.	-621 Jul 31 j 23:36	1° \approx 12'01	28.97386 AU
max. Earth dist.	-628 Jan 11 j 20:51	14° $\overline{31}$ '14	31.04907 AU		-621 Sep 21 j 21:19	30° \overline{R} $\overline{3}$	
retrograde	-628 Apr 26 j 03:42	17° $\overline{02}$ '10		direct	-621 Oct 19 j 00:13	29° $\overline{47}$ '46	
opposition	-628 Jul 15 j 23:56	15° $\overline{37}$ '47	0°-5'-42		-621 Nov 14 j 17:06	0° \approx	
min. Earth dist.	-628 Jul 15 j 06:57	15° $\overline{38}$ '56	29.04506 AU				
direct	-628 Oct 02 j 18:53	14° $\overline{14}$ '51		conjunction	-620 Jan 28 j 19:29	2° \approx 15'25	0°-38'-19
				minimum elong	-620 Jan 28 j 19:28	2° \approx 15'25	0°38'22
conjunction	-627 Jan 12 j 15:21	16° $\overline{42}$ '20	0°-7'-36	max. Earth dist.	-620 Jan 29 j 15:53	2° \approx 17'21	30.96725 AU
minimum elong	-627 Jan 12 j 15:22	16° $\overline{42}$ '20	0°07'37	retrograde	-620 May 14 j 09:50	4° \approx 49'02	
behind sun begin	-627 Jan 12 j 09:31	16° $\overline{41}$ '49		min. Earth dist.	-620 Aug 02 j 11:56	3° \approx 25'32	28.96141 AU
behind sun end	-627 Jan 12 j 21:12	16° $\overline{42}$ '52		opposition	-620 Aug 03 j 07:36	3° \approx 24'11	0°-43'-16
max. Earth dist.	-627 Jan 13 j 08:37	16° $\overline{43}$ '58	31.04080 AU	direct	-620 Oct 20 j 11:57	2° \approx 01'12	
retrograde	-627 Apr 28 j 15:58	19° $\overline{14}$ '56					
opposition	-627 Jul 18 j 12:50	17° $\overline{50}$ '32	0°-10'-30	conjunction	-619 Jan 30 j 06:35	4° \approx 28'52	0°-42'-33
min. Earth dist.	-627 Jul 17 j 20:02	17° $\overline{51}$ '40	29.03691 AU	minimum elong	-619 Jan 30 j 06:35	4° \approx 28'52	0°42'34
direct	-627 Oct 05 j 06:50	16° $\overline{27}$ '39		max. Earth dist.	-619 Jan 31 j 02:47	4° \approx 30'47	30.95517 AU
				retrograde	-619 May 17 j 00:49	7° \approx 02'34	
conjunction	-626 Jan 15 j 01:54	18° $\overline{55}$ '10	0°-12'-3	opposition	-619 Aug 05 j 20:11	5° \approx 37'39	0°-47'-45
minimum elong	-626 Jan 15 j 01:53	18° $\overline{55}$ '10	0°12'05	min. Earth dist.	-619 Aug 04 j 23:37	5° \approx 39'03	28.94988 AU
behind sun begin	-626 Jan 14 j 21:28	18° $\overline{54}$ '46		direct	-619 Oct 22 j 23:48	4° \approx 14'37	
behind sun end	-626 Jan 15 j 06:18	18° $\overline{55}$ '34					
max. Earth dist.	-626 Jan 15 j 19:29	18° $\overline{56}$ '50	31.03273 AU	conjunction	-618 Feb 01 j 17:49	6° \approx 42'19	0°-46'-42
retrograde	-626 May 01 j 05:45	21° $\overline{27}$ '57		minimum elong	-618 Feb 01 j 17:48	6° \approx 42'19	0°46'44
min. Earth dist.	-626 Jul 20 j 07:32	20° $\overline{04}$ '46	29.02870 AU	max. Earth dist.	-618 Feb 02 j 15:16	6° \approx 44'21	30.94405 AU
opposition	-626 Jul 21 j 01:48	20° $\overline{03}$ '31	0°-15'-17	retrograde	-618 May 19 j 13:44	9° \approx 16'08	
direct	-626 Oct 07 j 18:14	18° $\overline{40}$ '40		opposition	-618 Aug 08 j 08:55	7° \approx 51'08	0°-52'-10
				min. Earth dist.	-618 Aug 07 j 12:23	7° \approx 52'33	28.93948 AU
conjunction	-625 Jan 17 j 12:27	21° $\overline{08}$ '14	0°-16'-31	direct	-618 Oct 25 j 12:10	6° \approx 28'06	
minimum elong	-625 Jan 17 j 12:26	21° $\overline{08}$ '14	0°16'31				
max. Earth dist.	-625 Jan 18 j 06:25	21° $\overline{09}$ '56	31.02415 AU	conjunction	-617 Feb 04 j 04:58	8° \approx 55'49	0°-50'-48
retrograde	-625 May 03 j 17:12	23° $\overline{41}$ '12		minimum elong	-617 Feb 04 j 04:58	8° \approx 55'49	0°50'48

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Attention, astronomical year style is used: The year -617 in astronomical counting style is the year 618 BCE in historical counting style.

max. Earth dist.	-617 Feb 05 j 02:52	8° \approx 57'53	30.93437 AU	max. Earth dist.	-609 Feb 23 j 03:58	26° \approx 51'02	30.87584 AU
retrograde	-617 May 22 j 03:33	11° \approx 29'44		retrograde	-609 Jun 09 j 12:34	29° \approx 23'29	
opposition	-617 Aug 10 j 21:31	10° \approx 04'41	0°-56'-30	min. Earth dist.	-609 Aug 28 j 04:10	27° \approx 59'42	28.87216 AU
min. Earth dist.	-617 Aug 09 j 23:26	10° \approx 06'13	28.93049 AU	opposition	-609 Aug 29 j 02:06	27° \approx 58'11	-1°-27'-43
direct	-617 Oct 27 j 23:52	8° \approx 41'38		direct	-609 Nov 14 j 16:58	26° \approx 35'01	
conjunction	-616 Feb 06 j 16:23	11° \approx 09'24	0°-54'-49	conjunction	-608 Feb 24 j 16:35	29° \approx 03'12	-1°-23'-36
minimum elong	-616 Feb 06 j 16:23	11° \approx 09'24	0°54'50	minimum elong	-608 Feb 24 j 16:35	29° \approx 03'12	1°23'37
max. Earth dist.	-616 Feb 07 j 14:43	11° \approx 11'31	30.92590 AU	max. Earth dist.	-608 Feb 25 j 16:08	29° \approx 05'26	30.86683 AU
retrograde	-616 May 23 j 15:25	13° \approx 43'26			-608 Mar 21 j 07:40	0° \approx	
opposition	-616 Aug 12 j 10:05	12° \approx 18'22	-1°00'-45	retrograde	-608 Jun 11 j 03:00	1° \approx 37'56	
min. Earth dist.	-616 Aug 11 j 12:32	12° \approx 19'51	28.92272 AU	opposition	-608 Aug 30 j 14:16	0° \approx 12'34	-1°-31'-5
direct	-616 Oct 29 j 10:41	10° \approx 55'19		min. Earth dist.	-608 Aug 29 j 15:28	0° \approx 14'10	28.86327 AU
conjunction	-615 Feb 08 j 03:58	13° \approx 23'08	0°-58'-45		-608 Sep 07 j 03:17	30° \approx	
minimum elong	-615 Feb 08 j 03:57	13° \approx 23'08	0°58'46	direct	-608 Nov 16 j 05:05	28° \approx 49'20	
max. Earth dist.	-615 Feb 09 j 03:20	13° \approx 25'21	30.91869 AU		-607 Jan 21 j 06:55	0° \approx	
	-615 Mar 26 j 06:28	15° \approx		conjunction	-607 Feb 26 j 04:59	1° \approx 17'35	-1°-26'-41
retrograde	-615 May 26 j 05:10	15° \approx 57'17		minimum elong	-607 Feb 26 j 04:59	1° \approx 17'35	1°26'42
	-615 Jul 28 j 20:56	15° \approx		max. Earth dist.	-607 Feb 27 j 04:33	1° \approx 19'48	30.85802 AU
opposition	-615 Aug 14 j 22:35	14° \approx 32'12	-1°-4'-55	retrograde	-607 Jun 13 j 15:48	3° \approx 52'21	
min. Earth dist.	-615 Aug 13 j 23:39	14° \approx 33'47	28.91594 AU	min. Earth dist.	-607 Sep 01 j 04:40	2° \approx 28'28	28.85495 AU
direct	-615 Oct 31 j 22:20	13° \approx 09'10		opposition	-607 Sep 02 j 02:37	2° \approx 26'56	-1°-34'-19
	-614 Jan 25 j 04:32	15° \approx		direct	-607 Nov 18 j 16:40	1° \approx 03'39	
conjunction	-614 Feb 10 j 15:26	15° \approx 37'02	-1°-2'-36	conjunction	-606 Feb 28 j 17:23	3° \approx 31'56	-1°-29'-39
minimum elong	-614 Feb 10 j 15:25	15° \approx 37'02	1°02'38	minimum elong	-606 Feb 28 j 17:23	3° \approx 31'56	1°29'40
max. Earth dist.	-614 Feb 11 j 14:29	15° \approx 39'13	30.91218 AU	max. Earth dist.	-606 Mar 01 j 17:44	3° \approx 34'14	30.85020 AU
retrograde	-614 May 28 j 17:44	18° \approx 11'20		retrograde	-606 Jun 16 j 06:07	6° \approx 06'45	
opposition	-614 Aug 17 j 11:18	16° \approx 46'13	-1°-9'00	opposition	-606 Sep 04 j 14:47	4° \approx 41'17	-1°-37'-25
min. Earth dist.	-614 Aug 16 j 13:02	16° \approx 47'45	28.90977 AU	min. Earth dist.	-606 Sep 03 j 15:37	4° \approx 42'54	28.84773 AU
direct	-614 Nov 03 j 07:56	15° \approx 23'12		direct	-606 Nov 21 j 05:09	3° \approx 17'58	
conjunction	-613 Feb 13 j 03:22	17° \approx 51'08	-1°-6'-22	conjunction	-605 Mar 03 j 05:53	5° \approx 46'19	-1°-32'-28
minimum elong	-613 Feb 13 j 03:22	17° \approx 51'08	1°06'23	minimum elong	-605 Mar 03 j 05:53	5° \approx 46'19	1°32'29
max. Earth dist.	-613 Feb 14 j 03:41	17° \approx 53'26	30.90608 AU	max. Earth dist.	-605 Mar 04 j 05:44	5° \approx 48'34	30.84356 AU
retrograde	-613 May 31 j 05:51	20° \approx 25'32		retrograde	-605 Jun 18 j 18:17	8° \approx 21'11	
opposition	-613 Aug 19 j 23:49	19° \approx 00'25	-1°-12'-58	min. Earth dist.	-605 Sep 06 j 04:35	6° \approx 57'16	28.84194 AU
min. Earth dist.	-613 Aug 19 j 00:49	19° \approx 02'01	28.90365 AU	opposition	-605 Sep 07 j 02:58	6° \approx 55'42	-1°-40'-22
direct	-613 Nov 05 j 19:49	17° \approx 37'24		direct	-605 Nov 23 j 15:08	5° \approx 32'22	
conjunction	-612 Feb 15 j 15:20	20° \approx 05'25	-1°-10'-2	conjunction	-604 Mar 04 j 18:40	8° \approx 00'47	-1°-35'-9
minimum elong	-612 Feb 15 j 15:20	20° \approx 05'25	1°10'04	minimum elong	-604 Mar 04 j 18:40	8° \approx 00'47	1°35'11
max. Earth dist.	-612 Feb 16 j 14:35	20° \approx 07'37	30.89976 AU	max. Earth dist.	-604 Mar 05 j 19:41	8° \approx 03'09	30.83844 AU
retrograde	-612 Jun 01 j 20:10	22° \approx 39'55		retrograde	-604 Jun 20 j 06:24	10° \approx 35'42	
opposition	-612 Aug 21 j 12:29	21° \approx 14'47	-1°-16'-50	opposition	-604 Sep 08 j 15:02	9° \approx 10'13	-1°-43'-9
min. Earth dist.	-612 Aug 20 j 13:53	21° \approx 16'21	28.89711 AU	min. Earth dist.	-604 Sep 07 j 15:50	9° \approx 11'51	28.83749 AU
direct	-612 Nov 07 j 05:13	19° \approx 51'45		direct	-604 Nov 25 j 03:03	7° \approx 46'53	
conjunction	-611 Feb 17 j 03:38	22° \approx 19'49	-1°-13'-36	conjunction	-603 Mar 07 j 07:18	10° \approx 15'23	-1°-37'-42
minimum elong	-611 Feb 17 j 03:38	22° \approx 19'49	1°13'36	minimum elong	-603 Mar 07 j 07:18	10° \approx 15'23	1°37'43
max. Earth dist.	-611 Feb 18 j 03:48	22° \approx 22'06	30.89263 AU	max. Earth dist.	-603 Mar 08 j 07:20	10° \approx 17'39	30.83465 AU
retrograde	-611 Jun 04 j 08:36	24° \approx 54'25		retrograde	-603 Jun 22 j 20:13	12° \approx 50'22	
min. Earth dist.	-611 Aug 23 j 02:30	23° \approx 30'48	28.88952 AU	min. Earth dist.	-603 Sep 10 j 04:12	11° \approx 26'31	28.83444 AU
opposition	-611 Aug 24 j 00:59	23° \approx 29'14	-1°-20'-35	opposition	-603 Sep 11 j 03:06	11° \approx 24'54	-1°-45'-48
direct	-611 Nov 09 j 16:57	22° \approx 06'11		direct	-603 Nov 27 j 11:58	10° \approx 01'34	
conjunction	-610 Feb 19 j 15:52	24° \approx 34'18	-1°-17'-3	conjunction	-602 Mar 09 j 20:15	12° \approx 30'11	-1°-40'-5
minimum elong	-610 Feb 19 j 15:52	24° \approx 34'18	1°17'04	minimum elong	-602 Mar 09 j 20:15	12° \approx 30'11	1°40'07
max. Earth dist.	-610 Feb 20 j 15:05	24° \approx 36'30	30.88465 AU	max. Earth dist.	-602 Mar 10 j 21:25	12° \approx 32'33	30.83208 AU
retrograde	-610 Jun 06 j 23:48	27° \approx 08'57		retrograde	-602 Jun 25 j 08:31	15° \approx 05'13	
opposition	-610 Aug 26 j 13:34	25° \approx 43'43	-1°-24'-13	opposition	-602 Sep 13 j 15:09	13° \approx 39'48	-1°-48'-16
min. Earth dist.	-610 Aug 25 j 14:52	25° \approx 45'18	28.88117 AU	min. Earth dist.	-602 Sep 12 j 16:15	13° \approx 41'24	28.83233 AU
direct	-610 Nov 12 j 04:38	24° \approx 20'37		direct	-602 Nov 29 j 23:11	12° \approx 16'28	
conjunction	-609 Feb 22 j 04:09	26° \approx 48'47	-1°-20'-23	conjunction	-601 Mar 12 j 09:11	14° \approx 45'11	-1°-42'-20
minimum elong	-609 Feb 22 j 04:09	26° \approx 48'47	1°20'24	minimum elong	-601 Mar 12 j 09:11	14° \approx 45'11	1°42'21

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 20

Attention, astronomical year style is used: The year -601 in astronomical counting style is the year 602 BCE in historical counting style.

max. Earth dist.	-601 Mar 13 j 09:24	14° ✕ 47'28	30.83037 AU	max. Earth dist.	-593 Mar 31 j 19:12	2° ☿ 49'53	30.80390 AU
retrograde	-601 Jun 27 j 23:20	17° ✕ 20'17		retrograde	-593 Jul 16 j 09:40	5° ☿ 22'46	
min. Earth dist.	-601 Sep 15 j 04:18	15° ✕ 56'30	28.83084 AU	min. Earth dist.	-593 Oct 03 j 06:51	3° ☿ 58'37	28.80413 AU
opposition	-601 Sep 16 j 03:12	15° ✕ 54'53	-1°-50'-35	opposition	-593 Oct 04 j 01:52	3° ☿ 57'16	-2°-2'-47
direct	-601 Dec 02 j 10:19	14° ✕ 31'33		direct	-593 Dec 20 j 10:07	2° ☿ 33'31	
conjunction	-600 Mar 13 j 22:30	17° ✕ 00'24	-1°-44'-25	conjunction	-592 Apr 01 j 11:20	5° ☿ 02'52	-1°-55'-9
minimum elong	-600 Mar 13 j 22:30	17° ✕ 00'24	1°44'26	minimum elong	-592 Apr 01 j 11:20	5° ☿ 02'52	1°55'10
max. Earth dist.	-600 Mar 14 j 23:06	17° ✕ 02'43	30.82874 AU	max. Earth dist.	-592 Apr 02 j 07:39	5° ☿ 04'46	30.80194 AU
retrograde	-600 Jun 29 j 11:58	19° ✕ 35'33		retrograde	-592 Jul 17 j 22:51	7° ☿ 37'43	
opposition	-600 Sep 17 j 15:08	18° ✕ 10'11	-1°-52'-44	opposition	-592 Oct 05 j 13:17	6° ☿ 12'14	-2°-3'-29
min. Earth dist.	-600 Sep 16 j 17:23	18° ✕ 11'43	28.82910 AU	min. Earth dist.	-592 Oct 04 j 18:17	6° ☿ 13'34	28.80290 AU
direct	-600 Dec 03 j 21:45	16° ✕ 46'51		direct	-592 Dec 21 j 20:48	4° ☿ 48'25	
conjunction	-599 Mar 16 j 11:57	19° ✕ 15'48	-1°-46'-21	conjunction	-591 Apr 04 j 01:11	7° ☿ 17'51	-1°-55'-43
minimum elong	-599 Mar 16 j 11:56	19° ✕ 15'48	1°46'21	minimum elong	-591 Apr 04 j 01:11	7° ☿ 17'51	1°55'44
max. Earth dist.	-599 Mar 17 j 11:38	19° ✕ 18'02	30.82678 AU	max. Earth dist.	-591 Apr 04 j 22:03	7° ☿ 19'49	30.80131 AU
retrograde	-599 Jul 02 j 03:14	21° ✕ 50'59		retrograde	-591 Jul 20 j 10:41	9° ☿ 52'40	
min. Earth dist.	-599 Sep 19 j 05:02	20° ✕ 27'11	28.82678 AU	min. Earth dist.	-591 Oct 07 j 06:42	8° ☿ 28'29	28.80297 AU
opposition	-599 Sep 20 j 03:09	20° ✕ 25'38	-1°-54'-42	opposition	-591 Oct 08 j 00:49	8° ☿ 27'12	-2°-3'-59
direct	-599 Dec 06 j 09:43	19° ✕ 02'16		direct	-591 Dec 24 j 07:42	7° ☿ 03'22	
conjunction	-598 Mar 19 j 01:18	21° ✕ 31'18	-1°-48'-6	conjunction	-590 Apr 06 j 14:53	9° ☿ 32'53	-1°-56'-7
minimum elong	-598 Mar 19 j 01:18	21° ✕ 31'18	1°48'07	minimum elong	-590 Apr 06 j 14:53	9° ☿ 32'53	1°56'07
max. Earth dist.	-598 Mar 20 j 00:24	21° ✕ 33'29	30.82387 AU	max. Earth dist.	-590 Apr 07 j 11:00	9° ☿ 34'47	30.80217 AU
retrograde	-598 Jul 04 j 17:04	24° ✕ 06'29		retrograde	-590 Jul 23 j 01:03	12° ☿ 07'40	
opposition	-598 Sep 22 j 15:18	22° ✕ 41'07	-1°-56'-30	opposition	-590 Oct 10 j 12:15	10° ☿ 42'15	-2°-4'-18
min. Earth dist.	-598 Sep 21 j 18:40	22° ✕ 42'34	28.82345 AU	min. Earth dist.	-590 Oct 09 j 17:38	10° ☿ 43'34	28.80438 AU
direct	-598 Dec 08 j 22:11	21° ✕ 17'43		direct	-590 Dec 26 j 19:32	9° ☿ 18'24	
conjunction	-597 Mar 21 j 15:00	23° ✕ 46'49	-1°-49'-42	conjunction	-589 Apr 09 j 04:54	11° ☿ 48'02	-1°-56'-19
minimum elong	-597 Mar 21 j 15:00	23° ✕ 46'49	1°49'43	minimum elong	-589 Apr 09 j 04:54	11° ☿ 48'02	1°56'20
max. Earth dist.	-597 Mar 22 j 13:53	23° ✕ 48'59	30.82017 AU	max. Earth dist.	-589 Apr 10 j 00:39	11° ☿ 49'53	30.80401 AU
retrograde	-597 Jul 07 j 07:49	26° ✕ 21'58		retrograde	-589 Jul 25 j 14:09	14° ☿ 22'47	
min. Earth dist.	-597 Sep 24 j 06:03	24° ✕ 58'03	28.81931 AU	opposition	-589 Oct 12 j 23:39	12° ☿ 57'26	-2°-4'-26
opposition	-597 Sep 25 j 03:05	24° ✕ 56'35	-1°-58'-7	min. Earth dist.	-589 Oct 12 j 06:33	12° ☿ 58'38	28.80662 AU
direct	-597 Dec 11 j 11:50	23° ✕ 33'06		direct	-589 Dec 29 j 07:25	11° ☿ 33'34	
conjunction	-596 Mar 23 j 04:37	26° ✕ 02'16	-1°-51'-8	conjunction	-588 Apr 10 j 19:07	14° ☿ 03'20	-1°-56'-21
minimum elong	-596 Mar 23 j 04:37	26° ✕ 02'16	1°51'10	minimum elong	-588 Apr 10 j 19:07	14° ☿ 03'20	1°56'22
max. Earth dist.	-596 Mar 24 j 02:16	26° ✕ 04'18	30.81572 AU	max. Earth dist.	-588 Apr 11 j 14:28	14° ☿ 05'09	30.80655 AU
retrograde	-596 Jul 08 j 20:15	28° ✕ 37'21		retrograde	-588 Jul 27 j 04:44	16° ☿ 38'02	
opposition	-596 Sep 26 j 15:01	27° ✕ 11'56	-1°-59'-34	opposition	-588 Oct 14 j 10:58	15° ☿ 12'45	-2°-4'-22
min. Earth dist.	-596 Sep 25 j 19:26	27° ✕ 13'19	28.81480 AU	min. Earth dist.	-588 Oct 13 j 17:34	15° ☿ 13'59	28.80915 AU
direct	-596 Dec 12 j 22:47	25° ✕ 48'24		direct	-588 Dec 30 j 20:44	13° ☿ 48'54	
conjunction	-595 Mar 25 j 18:17	28° ✕ 17'35	-1°-52'-24	conjunction	-587 Apr 13 j 09:12	16° ☿ 18'47	-1°-56'-12
minimum elong	-595 Mar 25 j 18:17	28° ✕ 17'35	1°52'25	minimum elong	-587 Apr 13 j 09:12	16° ☿ 18'47	1°56'13
max. Earth dist.	-595 Mar 26 j 16:30	28° ✕ 19'40	30.81118 AU	max. Earth dist.	-587 Apr 14 j 03:12	16° ☿ 20'28	30.80892 AU
	-595 May 14 j 06:13	0° ☿		retrograde	-587 Jul 29 j 17:59	18° ☿ 53'27	
retrograde	-595 Jul 11 j 09:09	0° ☿ 52'37		opposition	-587 Oct 16 j 22:28	17° ☿ 28'14	-2°-4'-6
	-595 Sep 09 j 04:27	30° ♊		min. Earth dist.	-587 Oct 16 j 06:47	17° ☿ 29'20	28.81136 AU
min. Earth dist.	-595 Sep 28 j 06:45	29° ✕ 28'34	28.81037 AU	direct	-586 Jan 02 j 07:36	16° ☿ 04'21	
opposition	-595 Sep 29 j 02:38	29° ✕ 27'10	-2°00'-49				
direct	-595 Dec 15 j 11:48	28° ✕ 03'32		conjunction	-586 Apr 15 j 23:37	18° ☿ 34'21	-1°-55'-52
	-594 Mar 13 j 16:49	0° ☿		minimum elong	-586 Apr 15 j 23:37	18° ☿ 34'21	1°55'52
				max. Earth dist.	-586 Apr 16 j 17:35	18° ☿ 36'02	30.81082 AU
conjunction	-594 Mar 28 j 07:51	0° ☿ 32'47	-1°-53'-30	retrograde	-586 Aug 01 j 08:07	21° ☿ 08'57	
minimum elong	-594 Mar 28 j 07:51	0° ☿ 32'47	1°53'31	opposition	-586 Oct 19 j 09:43	19° ☿ 43'47	-2°-3'-39
max. Earth dist.	-594 Mar 29 j 04:38	0° ☿ 34'44	30.80708 AU	min. Earth dist.	-586 Oct 18 j 18:15	19° ☿ 44'52	28.81277 AU
retrograde	-594 Jul 13 j 22:37	3° ☿ 07'45		direct	-585 Jan 04 j 20:55	18° ☿ 19'52	
opposition	-594 Oct 01 j 14:19	1° ☿ 42'16	-2°-1'-54				
min. Earth dist.	-594 Sep 30 j 19:08	1° ☿ 43'37	28.80678 AU	conjunction	-585 Apr 18 j 13:56	20° ☿ 49'57	-1°-55'-21
direct	-594 Dec 17 j 21:54	0° ☿ 18'34		minimum elong	-585 Apr 18 j 13:56	20° ☿ 49'57	1°55'22
				max. Earth dist.	-585 Apr 19 j 05:46	20° ☿ 51'26	30.81183 AU
conjunction	-593 Mar 30 j 21:36	2° ☿ 47'51	-1°-54'-25	retrograde	-585 Aug 03 j 21:42	23° ☿ 24'28	
minimum elong	-593 Mar 30 j 21:36	2° ☿ 47'51	1°54'26	opposition	-585 Oct 21 j 21:05	21° ☿ 59'19	-2°-3'-1

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Attention, astronomical year style is used: The year -585 in astronomical counting style is the year 586 BCE in historical counting style.

min. Earth dist.	-585 Oct 21 j 06:55	22° Υ 00'20	28.81337 AU	retrograde	-577 Aug 22 j 00:20	11° R 24'39	
direct	-584 Jan 07 j 07:43	20° Υ 35'21		opposition	-577 Nov 08 j 12:26	9° R 59'46	-1°-51'-21
				min. Earth dist.	-577 Nov 08 j 02:51	10° R 00'26	28.83292 AU
conjunction	-584 Apr 20 j 04:28	23° Υ 05'31	-1°-54'-40	direct	-576 Jan 25 j 08:19	8° R 35'20	
minimum elong	-584 Apr 20 j 04:29	23° Υ 05'31	1°54'41				
max. Earth dist.	-584 Apr 20 j 20:22	23° Υ 07'00	30.81204 AU	conjunction	-576 May 08 j 22:59	11° R 06'04	-1°-43'-7
retrograde	-584 Aug 05 j 08:41	25° Υ 39'55		minimum elong	-576 May 08 j 22:59	11° R 06'04	1°43'07
opposition	-584 Oct 23 j 08:11	24° Υ 14'47	-2°-2'-11	max. Earth dist.	-576 May 09 j 08:25	11° R 06'57	30.83563 AU
min. Earth dist.	-584 Oct 22 j 18:46	24° Υ 15'45	28.81324 AU	retrograde	-576 Aug 23 j 13:22	13° R 39'27	
direct	-583 Jan 08 j 20:30	22° Υ 50'46		opposition	-576 Nov 09 j 23:10	12° R 14'38	-1°-49'-6
				min. Earth dist.	-576 Nov 09 j 14:46	12° R 15'14	28.84047 AU
conjunction	-583 Apr 22 j 18:45	25° Υ 20'58	-1°-53'-49	direct	-575 Jan 26 j 19:33	10° R 50'13	
minimum elong	-583 Apr 22 j 18:45	25° Υ 20'58	1°53'50				
max. Earth dist.	-583 Apr 23 j 08:44	25° Υ 22'17	30.81192 AU	conjunction	-575 May 11 j 13:32	13° R 21'02	-1°-40'-55
retrograde	-583 Aug 07 j 21:28	27° Υ 55'15		minimum elong	-575 May 11 j 13:32	13° R 21'02	1°40'56
opposition	-583 Oct 25 j 19:17	26° Υ 30'08	-2°-1'-11	max. Earth dist.	-575 May 11 j 23:07	13° R 21'56	30.84334 AU
min. Earth dist.	-583 Oct 25 j 06:20	26° Υ 31'03	28.81315 AU		-575 Jun 28 j 10:28	15° R	
direct	-582 Jan 11 j 07:19	25° Υ 06'01		retrograde	-575 Aug 26 j 01:17	15° R 54'18	
					-575 Oct 25 j 04:09	15° R	
conjunction	-582 Apr 25 j 09:03	27° Υ 36'18	-1°-52'-48	opposition	-575 Nov 12 j 09:55	14° R 29'35	-1°-46'-40
minimum elong	-582 Apr 25 j 09:03	27° Υ 36'18	1°52'48	min. Earth dist.	-575 Nov 12 j 02:19	14° R 30'08	28.84807 AU
max. Earth dist.	-582 Apr 25 j 23:16	27° Υ 37'37	30.81192 AU	direct	-574 Jan 29 j 08:10	13° R 05'09	
	-582 Jul 16 j 07:54	0° R			-574 Apr 27 j 21:56	15° R	
retrograde	-582 Aug 10 j 08:41	0° R 10'27					
	-582 Sep 04 j 15:21	30° R		conjunction	-574 May 14 j 03:56	15° R 36'04	-1°-38'-35
opposition	-582 Oct 28 j 06:22	28° Υ 45'20	-2°00'00	minimum elong	-574 May 14 j 03:56	15° R 36'04	1°38'34
min. Earth dist.	-582 Oct 27 j 18:41	28° Υ 46'10	28.81335 AU	max. Earth dist.	-574 May 14 j 11:17	15° R 36'45	30.85086 AU
direct	-581 Jan 13 j 18:08	27° Υ 21'08		retrograde	-574 Aug 28 j 14:56	18° R 09'11	
				opposition	-574 Nov 14 j 20:42	16° R 44'34	-1°-44'-5
conjunction	-581 Apr 27 j 23:23	29° Υ 51'28	-1°-51'-36	min. Earth dist.	-574 Nov 14 j 13:52	16° R 45'03	28.85528 AU
minimum elong	-581 Apr 27 j 23:23	29° Υ 51'28	1°51'37	direct	-573 Jan 31 j 19:20	15° R 20'05	
max. Earth dist.	-581 Apr 28 j 12:18	29° Υ 52'40	30.81264 AU				
	-581 May 01 j 18:38	0° R		conjunction	-573 May 16 j 18:41	17° R 51'05	-1°-36'-5
retrograde	-581 Aug 12 j 21:14	2° R 25'28		minimum elong	-573 May 16 j 18:41	17° R 51'05	1°36'06
opposition	-581 Oct 30 j 17:08	1° R 00'23	-1°-58'-37	max. Earth dist.	-573 May 17 j 01:46	17° R 51'45	30.85761 AU
min. Earth dist.	-581 Oct 30 j 05:16	1° R 01'13	28.81453 AU	retrograde	-573 Aug 31 j 01:50	20° R 24'03	
	-581 Dec 09 j 03:50	30° R		opposition	-573 Nov 17 j 07:27	18° R 59'30	-1°-41'-21
direct	-580 Jan 16 j 06:16	29° Υ 36'06		min. Earth dist.	-573 Nov 17 j 02:20	18° R 59'52	28.86151 AU
	-580 Feb 22 j 23:17	0° R		direct	-572 Feb 03 j 06:34	17° R 34'59	
conjunction	-580 Apr 29 j 13:45	2° R 06'30	-1°-50'-14	conjunction	-572 May 18 j 09:15	20° R 06'02	-1°-33'-27
minimum elong	-580 Apr 29 j 13:46	2° R 06'30	1°50'14	minimum elong	-572 May 18 j 09:16	20° R 06'02	1°33'27
max. Earth dist.	-580 Apr 30 j 02:17	2° R 07'40	30.81432 AU	max. Earth dist.	-572 May 18 j 14:22	20° R 06'31	30.86358 AU
retrograde	-580 Aug 14 j 08:32	4° R 40'22		retrograde	-572 Sep 01 j 14:02	22° R 38'51	
opposition	-580 Nov 01 j 04:07	3° R 15'18	-1°-57'-4	opposition	-572 Nov 18 j 18:08	21° R 14'21	-1°-38'-27
min. Earth dist.	-580 Oct 31 j 17:40	3° R 16'03	28.81689 AU	min. Earth dist.	-572 Nov 18 j 13:13	21° R 14'42	28.86703 AU
direct	-579 Jan 17 j 18:20	1° R 50'58		direct	-571 Feb 04 j 18:53	19° R 49'46	
conjunction	-579 May 02 j 03:56	4° R 21'25	-1°-48'-42	conjunction	-571 May 20 j 23:38	22° R 20'52	-1°-30'-41
minimum elong	-579 May 02 j 03:56	4° R 21'25	1°48'43	minimum elong	-571 May 20 j 23:39	22° R 20'52	1°30'42
max. Earth dist.	-579 May 02 j 16:01	4° R 22'33	30.81751 AU	max. Earth dist.	-571 May 21 j 04:04	22° R 21'17	30.86877 AU
retrograde	-579 Aug 16 j 21:46	6° R 55'10		retrograde	-571 Sep 04 j 00:27	24° R 53'31	
opposition	-579 Nov 03 j 14:54	5° R 30'08	-1°-55'-21	opposition	-571 Nov 21 j 04:52	23° R 29'03	-1°-35'-25
min. Earth dist.	-579 Nov 03 j 03:53	5° R 30'55	28.82077 AU	min. Earth dist.	-571 Nov 21 j 01:48	23° R 29'16	28.87201 AU
direct	-578 Jan 20 j 07:27	4° R 05'45		direct	-570 Feb 07 j 06:29	22° R 04'24	
conjunction	-578 May 04 j 18:11	6° R 36'18	-1°-47'00	conjunction	-570 May 23 j 14:05	24° R 35'33	-1°-27'-47
minimum elong	-578 May 04 j 18:12	6° R 36'18	1°47'01	minimum elong	-570 May 23 j 14:06	24° R 35'33	1°27'47
max. Earth dist.	-578 May 05 j 05:16	6° R 37'20	30.82218 AU	max. Earth dist.	-570 May 23 j 17:24	24° R 35'51	30.87380 AU
retrograde	-578 Aug 19 j 10:27	9° R 09'55		retrograde	-570 Sep 06 j 12:55	27° R 08'00	
opposition	-578 Nov 06 j 01:43	7° R 44'56	-1°-53'-26	opposition	-570 Nov 23 j 15:15	25° R 43'35	-1°-32'-15
min. Earth dist.	-578 Nov 05 j 16:09	7° R 45'37	28.82624 AU	min. Earth dist.	-570 Nov 23 j 12:06	25° R 43'49	28.87695 AU
direct	-577 Jan 22 j 18:21	6° R 20'32		direct	-569 Feb 09 j 19:24	24° R 18'52	
conjunction	-577 May 07 j 08:39	8° R 51'09	-1°-45'-8	conjunction	-569 May 26 j 04:30	26° R 50'04	-1°-24'-45
minimum elong	-577 May 07 j 08:39	8° R 51'09	1°45'10	minimum elong	-569 May 26 j 04:30	26° R 50'04	1°24'46
max. Earth dist.	-577 May 07 j 19:53	8° R 52'12	30.82843 AU	max. Earth dist.	-569 May 26 j 06:31	26° R 50'15	30.87887 AU

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Attention, astronomical year style is used: The year -569 in astronomical counting style is the year 570 BCE in historical counting style.

retrograde	-569 Sep 09 j 00:27	29° 8 22'20		retrograde	-561 Sep 26 j 23:29	17° II 15'04	
opposition	-569 Nov 26 j 01:49	27° 8 57'58	-1°-28'-56	opposition	-561 Dec 13 j 12:56	15° II 51'27	0°-58'-5
min. Earth dist.	-569 Nov 26 j 00:21	27° 8 58'04	28.88230 AU	min. Earth dist.	-561 Dec 13 j 16:50	15° II 51'11	28.95876 AU
direct	-568 Feb 12 j 06:47	26° 8 33'10		direct	-560 Mar 01 j 06:41	14° II 26'34	
conjunction	-568 May 27 j 18:47	29° 8 04'25	-1°-21'-35	conjunction	-560 Jun 15 j 12:14	16° II 58'21	0°-52'-19
minimum elong	-568 May 27 j 18:48	29° 8 04'25	1°21'35	minimum elong	-560 Jun 15 j 12:14	16° II 58'21	0°52'19
max. Earth dist.	-568 May 27 j 20:43	29° 8 04'36	30.88464 AU	max. Earth dist.	-560 Jun 15 j 06:05	16° II 57'47	30.96312 AU
	-568 Jun 22 j 04:53	0° II		retrograde	-560 Sep 28 j 09:49	19° II 29'13	
retrograde	-568 Sep 10 j 13:03	1° II 36'30		opposition	-560 Dec 14 j 23:29	18° II 05'40	0°-53'-47
opposition	-568 Nov 27 j 12:09	0° II 12'11	-1°-25'-30	min. Earth dist.	-560 Dec 15 j 05:18	18° II 05'15	28.96785 AU
min. Earth dist.	-568 Nov 27 j 10:43	0° II 12'17	28.88842 AU	direct	-559 Mar 03 j 18:25	16° II 40'44	
	-568 Dec 04 j 16:06	30° R 8					
direct	-567 Feb 13 j 21:06	28° 8 47'21		conjunction	-559 Jun 18 j 02:22	19° II 12'33	0°-48'-15
	-567 Apr 23 j 09:38	0° II		minimum elong	-559 Jun 18 j 02:22	19° II 12'33	0°48'17
				max. Earth dist.	-559 Jun 17 j 19:36	19° II 11'55	30.97177 AU
conjunction	-567 May 30 j 08:56	1° II 18'39	-1°-18'-18	retrograde	-559 Sep 30 j 21:16	21° II 43'12	
minimum elong	-567 May 30 j 08:56	1° II 18'39	1°18'20	opposition	-559 Dec 17 j 09:48	20° II 19'42	0°-49'-24
max. Earth dist.	-567 May 30 j 09:13	1° II 18'41	30.89140 AU	min. Earth dist.	-559 Dec 17 j 16:02	20° II 19'16	28.97592 AU
retrograde	-567 Sep 13 j 01:17	3° II 50'35		direct	-558 Mar 06 j 08:35	18° II 54'42	
opposition	-567 Nov 29 j 22:34	2° II 26'19	-1°-21'-55				
min. Earth dist.	-567 Nov 29 j 22:04	2° II 26'21	28.89591 AU	conjunction	-558 Jun 20 j 16:19	21° II 26'32	0°-44'-7
direct	-566 Feb 16 j 08:40	1° II 01'26		minimum elong	-558 Jun 20 j 16:19	21° II 26'32	0°44'07
				max. Earth dist.	-558 Jun 20 j 07:34	21° II 25'44	30.97949 AU
conjunction	-566 Jun 01 j 23:09	3° II 32'48	-1°-14'-55	retrograde	-558 Oct 03 j 09:00	23° II 57'00	
minimum elong	-566 Jun 01 j 23:09	3° II 32'48	1°14'54	opposition	-558 Dec 19 j 20:11	22° II 33'32	0°-44'-57
max. Earth dist.	-566 Jun 01 j 23:48	3° II 32'52	30.89959 AU	min. Earth dist.	-558 Dec 20 j 03:44	22° II 33'00	28.98337 AU
retrograde	-566 Sep 15 j 12:57	6° II 04'33		direct	-557 Mar 08 j 20:23	21° II 08'28	
opposition	-566 Dec 02 j 08:59	4° II 40'23	-1°-18'-14				
min. Earth dist.	-566 Dec 02 j 08:59	4° II 40'23	28.90467 AU	conjunction	-557 Jun 23 j 06:20	23° II 40'18	0°-39'-56
direct	-565 Feb 18 j 21:37	3° II 15'30		minimum elong	-557 Jun 23 j 06:20	23° II 40'18	0°39'57
				max. Earth dist.	-557 Jun 22 j 21:35	23° II 39'30	30.98673 AU
conjunction	-565 Jun 04 j 13:18	5° II 46'56	-1°-11'-24	retrograde	-557 Oct 05 j 20:06	26° II 10'32	
minimum elong	-565 Jun 04 j 13:18	5° II 46'56	1°11'25	opposition	-557 Dec 22 j 06:27	24° II 47'07	0°-40'-26
max. Earth dist.	-565 Jun 04 j 12:02	5° II 46'49	30.90917 AU	min. Earth dist.	-557 Dec 22 j 14:50	24° II 46'31	28.99041 AU
retrograde	-565 Sep 18 j 02:32	8° II 18'32		direct	-556 Mar 10 j 10:09	23° II 21'59	
opposition	-565 Dec 04 j 19:16	6° II 54'28	-1°-14'-25				
min. Earth dist.	-565 Dec 04 j 19:37	6° II 54'27	28.91488 AU	conjunction	-556 Jun 24 j 20:00	25° II 53'49	0°-35'-41
direct	-564 Feb 21 j 09:04	5° II 29'35		minimum elong	-556 Jun 24 j 20:00	25° II 53'49	0°35'41
				max. Earth dist.	-556 Jun 24 j 09:15	25° II 52'50	30.99390 AU
conjunction	-564 Jun 06 j 03:35	8° II 01'07	-1°-7'-47	retrograde	-556 Oct 07 j 08:57	28° II 23'51	
minimum elong	-564 Jun 06 j 03:35	8° II 01'07	1°07'47	opposition	-556 Dec 23 j 16:44	27° II 00'27	0°-35'-52
max. Earth dist.	-564 Jun 06 j 02:38	8° II 01'01	30.91992 AU	min. Earth dist.	-556 Dec 24 j 01:26	26° II 59'50	28.99782 AU
retrograde	-564 Sep 19 j 13:05	10° II 32'34		direct	-555 Mar 12 j 22:55	25° II 35'15	
opposition	-564 Dec 06 j 05:45	9° II 08'37	-1°-10'-29				
min. Earth dist.	-564 Dec 06 j 07:28	9° II 08'30	28.92597 AU	conjunction	-555 Jun 27 j 09:33	28° II 07'05	0°-31'-24
direct	-563 Feb 22 j 20:16	7° II 43'46		minimum elong	-555 Jun 27 j 09:33	28° II 07'05	0°31'24
				max. Earth dist.	-555 Jun 26 j 23:14	28° II 06'08	31.00154 AU
conjunction	-563 Jun 08 j 17:33	10° II 15'21	-1°-4'-3		-555 Aug 23 j 10:45	0° III	
minimum elong	-563 Jun 08 j 17:33	10° II 15'21	1°04'04	retrograde	-555 Oct 09 j 18:29	0° III 36'55	
max. Earth dist.	-563 Jun 08 j 14:56	10° II 15'07	30.93142 AU		-555 Nov 27 j 01:14	30° R II	
retrograde	-563 Sep 22 j 00:58	12° II 46'41		opposition	-555 Dec 26 j 03:05	29° II 13'34	0°-31'-15
opposition	-563 Dec 08 j 16:06	11° II 22'52	-1°-6'-27	min. Earth dist.	-555 Dec 26 j 13:03	29° II 12'51	29.00582 AU
min. Earth dist.	-563 Dec 08 j 17:53	11° II 22'44	28.93749 AU	direct	-554 Mar 15 j 11:26	27° II 48'19	
direct	-562 Feb 25 j 08:09	9° II 58'00			-554 Jun 20 j 21:30	0° III	
conjunction	-562 Jun 11 j 07:50	12° II 29'41	-1°00'-14	conjunction	-554 Jun 29 j 23:00	0° III 20'09	0°-27'-3
minimum elong	-562 Jun 11 j 07:51	12° II 29'41	1°00'14	minimum elong	-554 Jun 29 j 23:00	0° III 20'09	0°27'04
max. Earth dist.	-562 Jun 11 j 04:40	12° II 29'24	30.94277 AU	max. Earth dist.	-554 Jun 29 j 11:10	0° III 19'03	31.01012 AU
retrograde	-562 Sep 24 j 11:22	15° II 00'52		retrograde	-554 Oct 12 j 06:02	2° III 49'47	
opposition	-562 Dec 11 j 02:31	13° II 37'10	-1°-2'-19	opposition	-554 Dec 28 j 13:09	1° III 26'30	0°-26'-36
min. Earth dist.	-562 Dec 11 j 06:19	13° II 36'54	28.94859 AU	min. Earth dist.	-554 Dec 28 j 22:47	1° III 25'49	29.01496 AU
direct	-561 Feb 27 j 18:43	12° II 12'18		direct	-553 Mar 17 j 23:35	0° III 01'13	
conjunction	-561 Jun 13 j 22:07	14° II 44'03	0°-56'-19	conjunction	-553 Jul 02 j 12:32	2° III 33'04	0°-22'-41
minimum elong	-561 Jun 13 j 22:07	14° II 44'03	0°56'20	minimum elong	-553 Jul 02 j 12:32	2° III 33'04	0°22'42
max. Earth dist.	-561 Jun 13 j 17:26	14° II 43'37	30.95354 AU	max. Earth dist.	-553 Jul 02 j 00:46	2° III 31'59	31.01982 AU

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Attention, astronomical year style is used: The year -553 in astronomical counting style is the year 554 BCE in historical counting style.

retrograde	-553 Oct 14 j 15:57	5°02'33		behind sun end	-546 Jul 18 j 14:46	18°04'13	
opposition	-553 Dec 30 j 23:32	3°39'20	0°-21'-54	max. Earth dist.	-546 Jul 17 j 15:44	18°02'07	31.09572 AU
min. Earth dist.	-553 Dec 31 j 10:34	3°38'33	29.02530 AU	retrograde	-546 Oct 29 j 20:51	20°32'14	
direct	-552 Mar 19 j 10:15	2°14'03		opposition	-545 Jan 14 j 23:54	19°09'38	0°11'24
				min. Earth dist.	-545 Jan 15 j 16:19	19°08'29	29.09985 AU
conjunction	-552 Jul 04 j 01:45	4°45'56	0°-18'-17	direct	-545 Apr 04 j 23:56	17°44'22	
minimum elong	-552 Jul 04 j 01:45	4°45'56	0°18'17				
max. Earth dist.	-552 Jul 03 j 13:08	4°44'46	31.03084 AU	conjunction	-545 Jul 20 j 21:55	20°16'26	0°12'58
retrograde	-552 Oct 16 j 03:06	7°15'16		minimum elong	-545 Jul 20 j 21:55	20°16'26	0°12'57
opposition	-551 Jan 01 j 09:43	5°52'09	0°-17'-11	behind sun begin	-545 Jul 20 j 18:01	20°16'06	
min. Earth dist.	-551 Jan 01 j 20:16	5°51'25	29.03674 AU	behind sun end	-545 Jul 21 j 01:50	20°16'47	
direct	-551 Mar 21 j 21:53	4°26'53		max. Earth dist.	-545 Jul 20 j 02:54	20°14'41	31.10355 AU
				retrograde	-545 Nov 01 j 08:30	22°44'47	
conjunction	-551 Jul 06 j 15:02	6°58'49	0°-13'-51	opposition	-544 Jan 17 j 10:14	21°22'13	0°16'08
minimum elong	-551 Jul 06 j 15:02	6°58'49	0°13'52	min. Earth dist.	-544 Jan 18 j 02:28	21°21'05	29.10741 AU
behind sun begin	-551 Jul 06 j 11:47	6°58'32		direct	-544 Apr 06 j 12:44	19°56'54	
behind sun end	-551 Jul 06 j 18:18	6°59'07					
max. Earth dist.	-551 Jul 06 j 01:41	6°57'36	31.04266 AU	conjunction	-544 Jul 22 j 10:36	22°28'58	0°17'22
retrograde	-551 Oct 18 j 12:59	9°28'02		minimum elong	-544 Jul 22 j 10:35	22°28'58	0°17'22
opposition	-550 Jan 03 j 19:58	8°05'02	0°-12'-25	max. Earth dist.	-544 Jul 21 j 15:40	22°27'13	31.11085 AU
min. Earth dist.	-550 Jan 04 j 08:05	8°04'11	29.04888 AU	retrograde	-544 Nov 02 j 18:21	24°57'09	
direct	-550 Mar 24 j 08:38	6°39'47		opposition	-543 Jan 18 j 20:41	23°34'36	0°20'50
				min. Earth dist.	-543 Jan 19 j 14:25	23°33'21	29.11474 AU
conjunction	-550 Jul 09 j 04:24	9°11'47	0°-9'-25	direct	-543 Apr 09 j 00:12	22°09'15	
minimum elong	-550 Jul 09 j 04:23	9°11'47	0°09'24				
behind sun begin	-550 Jul 08 j 22:55	9°11'18		conjunction	-543 Jul 24 j 23:06	24°41'15	0°21'44
behind sun end	-550 Jul 09 j 09:51	9°12'16		minimum elong	-543 Jul 24 j 23:06	24°41'15	0°21'44
max. Earth dist.	-550 Jul 08 j 14:43	9°10'31	31.05487 AU	max. Earth dist.	-543 Jul 24 j 03:21	24°39'25	31.11830 AU
retrograde	-550 Oct 20 j 23:55	11°40'52		retrograde	-543 Nov 05 j 04:20	27°09'16	
opposition	-549 Jan 06 j 06:16	10°17'59	0°-7'-39	opposition	-542 Jan 21 j 06:51	25°46'44	0°25'30
min. Earth dist.	-549 Jan 06 j 18:39	10°17'06	29.06084 AU	min. Earth dist.	-542 Jan 22 j 00:02	25°45'32	29.12237 AU
direct	-549 Mar 26 j 21:38	8°52'45		direct	-542 Apr 11 j 12:31	24°21'20	
conjunction	-549 Jul 11 j 17:37	11°24'48	0°-4'-58	conjunction	-542 Jul 27 j 11:34	26°53'19	0°26'05
minimum elong	-549 Jul 11 j 17:38	11°24'48	0°04'58	minimum elong	-542 Jul 27 j 11:34	26°53'19	0°26'06
behind sun begin	-549 Jul 11 j 11:14	11°24'14		max. Earth dist.	-542 Jul 26 j 15:21	26°51'27	31.12618 AU
behind sun end	-549 Jul 12 j 00:02	11°25'22		retrograde	-542 Nov 07 j 12:54	29°21'10	
max. Earth dist.	-549 Jul 11 j 02:16	11°23'23	31.06651 AU	opposition	-541 Jan 23 j 17:17	27°58'41	0°30'07
retrograde	-549 Oct 23 j 11:30	13°53'46		min. Earth dist.	-541 Jan 24 j 11:35	27°57'24	29.13083 AU
opposition	-548 Jan 08 j 16:39	12°30'58	0°-2'-53	direct	-541 Apr 13 j 23:25	26°33'15	
min. Earth dist.	-548 Jan 09 j 06:11	12°30'01	29.07221 AU				
direct	-548 Mar 28 j 08:25	11°05'45		conjunction	-541 Jul 29 j 23:51	29°05'12	0°30'23
				minimum elong	-541 Jul 29 j 23:51	29°05'12	0°30'23
conjunction	-548 Jul 13 j 06:57	13°37'50	0°00'-26	max. Earth dist.	-541 Jul 29 j 03:52	29°03'20	31.13515 AU
minimum elong	-548 Jul 13 j 06:57	13°37'50	0°00'26		-541 Aug 24 j 03:11	0°00'	
behind sun begin	-548 Jul 13 j 00:23	13°37'15		retrograde	-541 Nov 09 j 22:17	1°32'54	
behind sun end	-548 Jul 13 j 13:30	13°38'25		opposition	-540 Jan 26 j 03:39	0°10'28	0°34'41
max. Earth dist.	-548 Jul 12 j 15:36	13°36'25	31.07734 AU	min. Earth dist.	-540 Jan 26 j 21:35	0°09'13	29.14033 AU
asc. node	-548 Aug 18 j 06:21	14°54'26			-540 Feb 01 j 09:38	30°00'	
retrograde	-548 Oct 24 j 22:35	16°06'40		direct	-540 Apr 15 j 11:29	28°45'02	
opposition	-547 Jan 10 j 03:08	14°43'57	0°01'53		-540 Jun 25 j 07:09	0°00'	
min. Earth dist.	-547 Jan 10 j 17:32	14°42'56	29.08246 AU				
direct	-547 Mar 30 j 22:00	13°18'44		conjunction	-540 Jul 31 j 12:01	1°16'57	0°34'38
				minimum elong	-540 Jul 31 j 12:01	1°16'57	0°34'39
conjunction	-547 Jul 15 j 19:52	15°50'50	0°04'06	max. Earth dist.	-540 Jul 30 j 15:08	1°15'01	31.14530 AU
minimum elong	-547 Jul 15 j 19:53	15°50'50	0°04'06	retrograde	-540 Nov 11 j 09:08	3°04'33	
behind sun begin	-547 Jul 15 j 13:24	15°50'15		opposition	-539 Jan 27 j 14:04	2°02'22'10	0°39'13
behind sun end	-547 Jul 16 j 02:22	15°51'24		min. Earth dist.	-539 Jan 28 j 08:22	2°02'05'53	29.15122 AU
max. Earth dist.	-547 Jul 15 j 02:26	15°49'13	31.08708 AU	direct	-539 Apr 17 j 21:22	0°05'56'45	
retrograde	-547 Oct 27 j 11:28	18°19'31		max. Earth dist.	-539 Aug 02 j 04:01	3°02'26'47	31.15665 AU
opposition	-546 Jan 12 j 13:31	16°56'51	0°06'39				
min. Earth dist.	-546 Jan 13 j 04:21	16°55'49	29.09171 AU	conjunction	-539 Aug 03 j 00:06	3°02'28'39	0°38'51
direct	-546 Apr 02 j 11:04	15°31'37		minimum elong	-539 Aug 03 j 00:06	3°02'28'39	0°38'51
				retrograde	-539 Nov 13 j 19:03	5°01'56'09	
conjunction	-546 Jul 18 j 09:04	18°03'43	0°08'32	opposition	-538 Jan 30 j 00:30	4°01'33'51	0°43'41
minimum elong	-546 Jul 18 j 09:03	18°03'43	0°08'33	min. Earth dist.	-538 Jan 30 j 19:14	4°01'32'33	29.16284 AU
behind sun begin	-546 Jul 18 j 03:21	18°03'13		direct	-538 Apr 20 j 10:35	3°01'08'28	

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Attention, astronomical year style is used: The year -538 in astronomical counting style is the year 539 BCE in historical counting style.

conjunction	-538 Aug 05 j 12:07	5°040'23	0°43'00	conjunction	-530 Aug 23 j 09:52	23°012'50	1°13'23
minimum elong	-538 Aug 05 j 12:07	5°040'22	0°43'00	minimum elong	-530 Aug 23 j 09:52	23°012'50	1°13'23
max. Earth dist.	-538 Aug 04 j 14:32	5°038'22	31.16849 AU	retrograde	-530 Dec 03 j 14:55	25°039'30	
retrograde	-538 Nov 16 j 07:18	8°007'47		opposition	-529 Feb 19 j 00:45	24°017'33	1°20'10
opposition	-537 Feb 01 j 10:54	6°045'33	0°48'05	min. Earth dist.	-529 Feb 19 j 23:05	24°016'00	29.24090 AU
min. Earth dist.	-537 Feb 02 j 05:35	6°044'15	29.17482 AU	direct	-529 May 10 j 22:45	22°052'17	
direct	-537 Apr 22 j 22:37	5°020'13					
max. Earth dist.	-537 Aug 07 j 03:19	7°050'11	31.18025 AU	conjunction	-529 Aug 25 j 20:57	25°023'50	1°16'45
				minimum elong	-529 Aug 25 j 20:56	25°023'50	1°16'45
conjunction	-537 Aug 08 j 00:15	7°052'08	0°47'05	max. Earth dist.	-529 Aug 24 j 20:22	25°021'32	31.24354 AU
minimum elong	-537 Aug 08 j 00:15	7°052'08	0°47'05	retrograde	-529 Dec 06 j 02:37	27°050'26	
retrograde	-537 Nov 18 j 16:55	10°019'27		opposition	-528 Feb 21 j 11:36	26°028'30	1°23'42
opposition	-536 Feb 03 j 21:37	8°057'18	0°52'24	min. Earth dist.	-528 Feb 22 j 09:13	26°027'00	29.24804 AU
min. Earth dist.	-536 Feb 04 j 17:36	8°055'55	29.18634 AU	direct	-528 May 12 j 10:16	25°003'14	
direct	-536 Apr 24 j 10:46	7°032'00		max. Earth dist.	-528 Aug 26 j 08:38	27°032'35	31.25105 AU
conjunction	-536 Aug 09 j 12:01	10°003'54	0°51'06	conjunction	-528 Aug 27 j 07:55	27°034'45	1°20'00
minimum elong	-536 Aug 09 j 12:00	10°003'54	0°51'06	minimum elong	-528 Aug 27 j 07:55	27°034'45	1°20'00
max. Earth dist.	-536 Aug 08 j 13:42	10°001'50	31.19139 AU		-528 Nov 28 j 19:57	0°00	
retrograde	-536 Nov 20 j 04:58	12°031'08		retrograde	-528 Dec 07 j 11:49	0°001'19	
opposition	-535 Feb 05 j 08:14	11°009'03	0°56'39		-528 Dec 16 j 05:30	30°00	
min. Earth dist.	-535 Feb 06 j 03:48	11°007'41	29.19705 AU	opposition	-527 Feb 22 j 22:35	28°039'24	1°27'07
direct	-535 Apr 26 j 23:43	9°043'46		min. Earth dist.	-527 Feb 23 j 20:51	28°037'52	29.25607 AU
max. Earth dist.	-535 Aug 11 j 01:49	12°013'36	31.20141 AU	direct	-527 May 14 j 21:48	27°014'12	
conjunction	-535 Aug 12 j 00:01	12°015'39	0°55'02	conjunction	-527 Aug 29 j 18:49	29°045'39	1°23'08
minimum elong	-535 Aug 12 j 00:01	12°015'39	0°55'02	minimum elong	-527 Aug 29 j 18:49	29°045'39	1°23'08
retrograde	-535 Nov 22 j 15:10	14°042'48		max. Earth dist.	-527 Aug 28 j 18:49	29°043'25	31.25958 AU
opposition	-534 Feb 07 j 18:55	13°020'45	1°00'49		-527 Sep 05 j 04:50	0°00	
min. Earth dist.	-534 Feb 08 j 16:04	13°019'17	29.20657 AU	retrograde	-527 Dec 09 j 23:49	2°0012'11	
direct	-534 Apr 29 j 11:35	11°055'30		opposition	-526 Feb 25 j 09:16	0°0050'20	1°30'24
				min. Earth dist.	-526 Feb 26 j 06:32	0°0048'52	29.26496 AU
conjunction	-534 Aug 14 j 11:53	14°027'21	0°58'54		-526 Mar 29 j 23:36	30°00	
minimum elong	-534 Aug 14 j 11:52	14°027'21	0°58'54	direct	-526 May 17 j 10:51	29°025'11	
max. Earth dist.	-534 Aug 13 j 12:44	14°025'12	31.21031 AU		-526 Jul 03 j 14:44	0°00	
	-534 Aug 29 j 05:31	15°00		max. Earth dist.	-526 Aug 31 j 06:36	1°0054'28	31.26862 AU
retrograde	-534 Nov 25 j 01:23	16°054'23					
opposition	-533 Feb 10 j 05:38	15°032'23	1°04'54	conjunction	-526 Sep 01 j 05:49	1°0056'38	1°26'09
min. Earth dist.	-533 Feb 11 j 02:19	15°030'57	29.21482 AU	minimum elong	-526 Sep 01 j 05:49	1°0056'38	1°26'09
	-533 Mar 02 j 05:03	15°00		retrograde	-526 Dec 12 j 10:39	4°0023'08	
direct	-533 May 02 j 00:32	14°007'08		opposition	-525 Feb 27 j 20:23	3°0001'21	1°33'33
	-533 Jun 29 j 16:20	15°00		min. Earth dist.	-525 Feb 28 j 18:39	2°0059'49	29.27418 AU
				direct	-525 May 19 j 22:56	1°0036'16	
conjunction	-533 Aug 16 j 23:35	16°038'56	1°02'40	conjunction	-525 Sep 03 j 16:33	4°0007'41	1°29'03
minimum elong	-533 Aug 16 j 23:34	16°038'56	1°02'40	minimum elong	-525 Sep 03 j 16:33	4°0007'41	1°29'03
max. Earth dist.	-533 Aug 15 j 23:51	16°036'44	31.21789 AU	max. Earth dist.	-525 Sep 02 j 17:07	4°0005'30	31.27778 AU
retrograde	-533 Nov 27 j 10:20	19°005'53		retrograde	-525 Dec 14 j 20:43	6°0034'10	
opposition	-532 Feb 12 j 16:30	17°043'55	1°08'52	opposition	-524 Mar 01 j 07:27	5°0012'27	1°36'35
min. Earth dist.	-532 Feb 13 j 14:23	17°042'24	29.22203 AU	min. Earth dist.	-524 Mar 02 j 04:49	5°0010'58	29.28310 AU
direct	-532 May 03 j 11:23	16°018'39		direct	-524 May 21 j 11:49	3°0047'26	
max. Earth dist.	-532 Aug 17 j 11:35	18°048'12	31.22467 AU	max. Earth dist.	-524 Sep 04 j 03:42	6°0016'36	31.28626 AU
conjunction	-532 Aug 18 j 11:11	18°050'24	1°06'20	conjunction	-524 Sep 05 j 03:21	6°0018'49	1°31'48
minimum elong	-532 Aug 18 j 11:11	18°050'24	1°06'21	minimum elong	-524 Sep 05 j 03:21	6°0018'49	1°31'48
retrograde	-532 Nov 28 j 19:24	21°017'14		retrograde	-524 Dec 16 j 06:08	8°0045'17	
opposition	-531 Feb 14 j 03:12	19°055'17	1°12'45	opposition	-523 Mar 03 j 18:37	7°0023'36	1°39'27
min. Earth dist.	-531 Feb 15 j 00:58	19°053'46	29.22844 AU	min. Earth dist.	-523 Mar 04 j 16:55	7°0022'04	29.29128 AU
direct	-531 May 05 j 23:27	18°030'01		direct	-523 May 23 j 22:24	5°0058'39	
conjunction	-531 Aug 20 j 22:31	21°001'41	1°09'55	conjunction	-523 Sep 07 j 14:08	8°0029'59	1°34'26
minimum elong	-531 Aug 20 j 22:31	21°001'41	1°09'55	minimum elong	-523 Sep 07 j 14:08	8°0029'59	1°34'26
max. Earth dist.	-531 Aug 19 j 21:59	20°059'25	31.23082 AU	max. Earth dist.	-523 Sep 06 j 14:49	8°0027'48	31.29380 AU
retrograde	-531 Dec 01 j 05:48	23°028'27		retrograde	-523 Dec 18 j 15:25	10°0056'26	
opposition	-530 Feb 16 j 13:57	22°006'30	1°16'31	opposition	-522 Mar 06 j 05:53	9°0034'46	1°42'11
min. Earth dist.	-530 Feb 17 j 12:05	22°004'58	29.23462 AU	min. Earth dist.	-522 Mar 07 j 03:59	9°0033'15	29.29808 AU
direct	-530 May 08 j 09:36	20°041'13		direct	-522 May 26 j 10:44	8°0009'51	
max. Earth dist.	-530 Aug 22 j 10:18	23°010'38	31.23694 AU				

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Attention, astronomical year style is used: The year -522 in astronomical counting style is the year 523 BCE in historical counting style.

max. Earth dist.	-522 Sep 09 j 00:31	10° $\mathring{\text{M}}$ 38'51	31.29980 AU	max. Earth dist.	-514 Sep 26 j 13:16	28° $\mathring{\text{M}}$ 03'21	31.32124 AU
					-514 Nov 24 j 20:46	0° $\mathring{\text{A}}$	
conjunction	-522 Sep 10 j 00:47	10° $\mathring{\text{M}}$ 41'07	1°36'55	retrograde	-513 Jan 07 j 09:08	0° $\mathring{\text{A}}$ 31'39	
minimum elong	-522 Sep 10 j 00:47	10° $\mathring{\text{M}}$ 41'07	1°36'55		-513 Feb 21 j 12:35	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
retrograde	-522 Dec 21 j 01:48	13° $\mathring{\text{M}}$ 07'33		opposition	-513 Mar 26 j 12:47	29° $\mathring{\text{M}}$ 09'50	1°59'48
opposition	-521 Mar 08 j 17:11	11° $\mathring{\text{M}}$ 45'54	1°44'47	min. Earth dist.	-513 Mar 27 j 08:48	29° $\mathring{\text{M}}$ 08'28	29.32456 AU
min. Earth dist.	-521 Mar 09 j 15:33	11° $\mathring{\text{M}}$ 44'22	29.30348 AU	direct	-513 Jun 15 j 22:10	27° $\mathring{\text{M}}$ 45'07	
direct	-521 May 28 j 21:11	10° $\mathring{\text{M}}$ 21'00			-513 Sep 22 j 21:18	0° $\mathring{\text{A}}$	
conjunction	-521 Sep 12 j 11:30	12° $\mathring{\text{M}}$ 52'11	1°39'16	conjunction	-513 Sep 29 j 20:01	0° $\mathring{\text{A}}$ 15'36	1°52'43
minimum elong	-521 Sep 12 j 11:30	12° $\mathring{\text{M}}$ 52'11	1°39'16	minimum elong	-513 Sep 29 j 20:01	0° $\mathring{\text{A}}$ 15'36	1°52'43
max. Earth dist.	-521 Sep 11 j 12:08	12° $\mathring{\text{M}}$ 50'00	31.30439 AU	max. Earth dist.	-513 Sep 28 j 22:44	0° $\mathring{\text{A}}$ 13'36	31.32531 AU
retrograde	-521 Dec 23 j 10:19	15° $\mathring{\text{M}}$ 18'35		retrograde	-512 Jan 09 j 19:58	2° $\mathring{\text{A}}$ 42'01	
opposition	-520 Mar 10 j 04:40	13° $\mathring{\text{M}}$ 56'55	1°47'13	opposition	-512 Mar 28 j 00:28	1° $\mathring{\text{A}}$ 20'12	2°00'55
min. Earth dist.	-520 Mar 11 j 03:21	13° $\mathring{\text{M}}$ 55'22	29.30731 AU	min. Earth dist.	-512 Mar 28 j 20:06	1° $\mathring{\text{A}}$ 18'52	29.32875 AU
direct	-520 May 30 j 09:49	12° $\mathring{\text{M}}$ 32'03			-512 May 31 j 14:19	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
				direct	-512 Jun 17 j 08:10	29° $\mathring{\text{M}}$ 55'35	
conjunction	-520 Sep 13 j 21:50	15° $\mathring{\text{M}}$ 03'07	1°41'29		-512 Jul 03 j 21:58	0° $\mathring{\text{A}}$	
minimum elong	-520 Sep 13 j 21:49	15° $\mathring{\text{M}}$ 03'07	1°41'29	max. Earth dist.	-512 Sep 30 j 10:00	2° $\mathring{\text{A}}$ 24'09	31.32928 AU
max. Earth dist.	-520 Sep 12 j 21:20	15° $\mathring{\text{M}}$ 00'50	31.30758 AU				
retrograde	-520 Dec 24 j 21:30	17° $\mathring{\text{M}}$ 29'29		conjunction	-512 Oct 01 j 05:46	2° $\mathring{\text{A}}$ 26'00	1°53'41
opposition	-519 Mar 12 j 15:59	16° $\mathring{\text{M}}$ 07'47	1°49'30	minimum elong	-512 Oct 01 j 05:46	2° $\mathring{\text{A}}$ 26'00	1°53'41
min. Earth dist.	-519 Mar 13 j 14:06	16° $\mathring{\text{M}}$ 06'16	29.30996 AU	retrograde	-511 Jan 11 j 04:41	4° $\mathring{\text{A}}$ 52'30	
direct	-519 Jun 01 j 20:38	14° $\mathring{\text{M}}$ 42'54		opposition	-511 Mar 30 j 12:16	3° $\mathring{\text{A}}$ 30'43	2°01'52
max. Earth dist.	-519 Sep 15 j 08:52	17° $\mathring{\text{M}}$ 11'41	31.30962 AU	min. Earth dist.	-511 Mar 31 j 07:53	3° $\mathring{\text{A}}$ 29'23	29.33236 AU
				direct	-511 Jun 19 j 19:57	2° $\mathring{\text{A}}$ 06'10	
conjunction	-519 Sep 16 j 08:19	17° $\mathring{\text{M}}$ 13'52	1°43'33	conjunction	-511 Oct 03 j 15:28	4° $\mathring{\text{A}}$ 36'33	1°54'29
minimum elong	-519 Sep 16 j 08:18	17° $\mathring{\text{M}}$ 13'52	1°43'33	minimum elong	-511 Oct 03 j 15:28	4° $\mathring{\text{A}}$ 36'33	1°54'29
retrograde	-519 Dec 27 j 06:28	19° $\mathring{\text{M}}$ 40'12		max. Earth dist.	-511 Oct 02 j 18:53	4° $\mathring{\text{A}}$ 34'37	31.33250 AU
opposition	-518 Mar 15 j 03:20	18° $\mathring{\text{M}}$ 18'27	1°51'37	retrograde	-510 Jan 13 j 16:13	7° $\mathring{\text{A}}$ 03'06	
min. Earth dist.	-518 Mar 16 j 02:19	18° $\mathring{\text{M}}$ 16'53	29.31162 AU	opposition	-510 Apr 01 j 23:56	5° $\mathring{\text{A}}$ 41'20	2°02'39
direct	-518 Jun 04 j 08:23	16° $\mathring{\text{M}}$ 53'33		min. Earth dist.	-510 Apr 02 j 18:42	5° $\mathring{\text{A}}$ 40'03	29.33512 AU
				direct	-510 Jun 22 j 05:42	4° $\mathring{\text{A}}$ 16'51	
conjunction	-518 Sep 18 j 18:30	19° $\mathring{\text{M}}$ 24'25	1°45'28	max. Earth dist.	-510 Oct 05 j 05:58	6° $\mathring{\text{A}}$ 45'21	31.33459 AU
minimum elong	-518 Sep 18 j 18:30	19° $\mathring{\text{M}}$ 24'25	1°45'27				
max. Earth dist.	-518 Sep 17 j 18:32	19° $\mathring{\text{M}}$ 22'11	31.31110 AU	conjunction	-510 Oct 06 j 01:21	6° $\mathring{\text{A}}$ 47'10	1°55'08
retrograde	-518 Dec 29 j 18:02	21° $\mathring{\text{M}}$ 50'43		minimum elong	-510 Oct 06 j 01:21	6° $\mathring{\text{A}}$ 47'10	1°55'08
opposition	-517 Mar 17 j 14:43	20° $\mathring{\text{M}}$ 28'55	1°53'35	retrograde	-509 Jan 16 j 01:53	9° $\mathring{\text{A}}$ 13'49	
min. Earth dist.	-517 Mar 18 j 12:26	20° $\mathring{\text{M}}$ 27'26	29.31303 AU	opposition	-509 Apr 04 j 12:01	7° $\mathring{\text{A}}$ 52'02	2°03'15
direct	-517 Jun 06 j 21:44	19° $\mathring{\text{M}}$ 04'01		min. Earth dist.	-509 Apr 05 j 07:27	7° $\mathring{\text{A}}$ 50'43	29.33656 AU
max. Earth dist.	-517 Sep 20 j 05:38	21° $\mathring{\text{M}}$ 32'38	31.31248 AU	direct	-509 Jun 24 j 16:45	6° $\mathring{\text{A}}$ 27'37	
conjunction	-517 Sep 21 j 04:32	21° $\mathring{\text{M}}$ 34'46	1°47'13	conjunction	-509 Oct 08 j 10:54	8° $\mathring{\text{A}}$ 57'51	1°55'37
minimum elong	-517 Sep 21 j 04:32	21° $\mathring{\text{M}}$ 34'46	1°47'13	minimum elong	-509 Oct 08 j 10:54	8° $\mathring{\text{A}}$ 57'51	1°55'37
retrograde	-516 Jan 01 j 04:20	24° $\mathring{\text{M}}$ 01'03		max. Earth dist.	-509 Oct 07 j 15:07	8° $\mathring{\text{A}}$ 56'00	31.33539 AU
opposition	-516 Mar 19 j 02:19	22° $\mathring{\text{M}}$ 39'12	1°55'23	retrograde	-508 Jan 18 j 14:02	11° $\mathring{\text{A}}$ 24'33	
min. Earth dist.	-516 Mar 20 j 00:32	22° $\mathring{\text{M}}$ 37'41	29.31477 AU	opposition	-508 Apr 05 j 23:58	10° $\mathring{\text{A}}$ 02'45	2°03'41
direct	-516 Jun 08 j 09:52	21° $\mathring{\text{M}}$ 14'19		min. Earth dist.	-508 Apr 06 j 18:08	10° $\mathring{\text{A}}$ 01'31	29.33662 AU
				direct	-508 Jun 26 j 05:42	8° $\mathring{\text{A}}$ 38'22	
conjunction	-516 Sep 22 j 14:30	23° $\mathring{\text{M}}$ 44'59	1°48'50				
minimum elong	-516 Sep 22 j 14:29	23° $\mathring{\text{M}}$ 44'59	1°48'50	conjunction	-508 Oct 09 j 20:39	11° $\mathring{\text{A}}$ 08'31	1°55'56
max. Earth dist.	-516 Sep 21 j 16:00	23° $\mathring{\text{M}}$ 42'53	31.31459 AU	minimum elong	-508 Oct 09 j 20:39	11° $\mathring{\text{A}}$ 08'31	1°55'56
retrograde	-515 Jan 02 j 14:08	26° $\mathring{\text{M}}$ 11'15		max. Earth dist.	-508 Oct 09 j 01:34	11° $\mathring{\text{A}}$ 06'44	31.33467 AU
opposition	-515 Mar 21 j 13:38	24° $\mathring{\text{M}}$ 49'24	1°57'02	retrograde	-507 Jan 20 j 01:10	13° $\mathring{\text{A}}$ 35'16	
min. Earth dist.	-515 Mar 22 j 10:21	24° $\mathring{\text{M}}$ 47'59	29.31726 AU	opposition	-507 Apr 08 j 11:55	12° $\mathring{\text{A}}$ 13'25	2°03'56
direct	-515 Jun 10 j 22:47	23° $\mathring{\text{M}}$ 24'32		min. Earth dist.	-507 Apr 09 j 06:51	12° $\mathring{\text{A}}$ 12'08	29.33529 AU
max. Earth dist.	-515 Sep 24 j 02:12	25° $\mathring{\text{M}}$ 53'03	31.31748 AU	direct	-507 Jun 28 j 17:14	10° $\mathring{\text{A}}$ 49'04	
				max. Earth dist.	-507 Oct 11 j 11:26	13° $\mathring{\text{A}}$ 17'21	31.33278 AU
conjunction	-515 Sep 25 j 00:25	25° $\mathring{\text{M}}$ 55'08	1°50'17	conjunction	-507 Oct 12 j 06:14	13° $\mathring{\text{A}}$ 19'07	1°56'05
minimum elong	-515 Sep 25 j 00:25	25° $\mathring{\text{M}}$ 55'08	1°50'17	minimum elong	-507 Oct 12 j 06:14	13° $\mathring{\text{A}}$ 19'07	1°56'06
retrograde	-514 Jan 04 j 23:57	28° $\mathring{\text{M}}$ 21'26		retrograde	-506 Jan 22 j 11:09	15° $\mathring{\text{A}}$ 45'54	
opposition	-514 Mar 24 j 01:12	26° $\mathring{\text{M}}$ 59'35	1°58'30	opposition	-506 Apr 10 j 23:52	14° $\mathring{\text{A}}$ 23'59	2°04'01
min. Earth dist.	-514 Mar 24 j 22:05	26° $\mathring{\text{M}}$ 58'09	29.32067 AU	min. Earth dist.	-506 Apr 11 j 17:28	14° $\mathring{\text{A}}$ 22'48	29.33276 AU
direct	-514 Jun 13 j 09:43	25° $\mathring{\text{M}}$ 34'47		direct	-506 Jul 01 j 06:23	12° $\mathring{\text{A}}$ 59'38	
conjunction	-514 Sep 27 j 10:16	28° $\mathring{\text{M}}$ 05'19	1°51'35				
minimum elong	-514 Sep 27 j 10:16	28° $\mathring{\text{M}}$ 05'19	1°51'35				

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Attention, astronomical year style is used: The year -506 in astronomical counting style is the year 507 BCE in historical counting style.

conjunction	-506 Oct 14 j 15:35	15° <u>♂</u> 29'35	1°56'05	conjunction	-498 Oct 31 j 16:57	2° <u>♂</u> 51'18	1°50'07
minimum elong	-506 Oct 14 j 15:36	15° <u>♂</u> 29'35	1°56'05	minimum elong	-498 Oct 31 j 16:57	2° <u>♂</u> 51'18	1°50'07
max. Earth dist.	-506 Oct 13 j 20:58	15° <u>♂</u> 27'50	31.32985 AU	max. Earth dist.	-498 Oct 31 j 05:24	2° <u>♂</u> 50'13	31.31980 AU
retrograde	-505 Jan 24 j 21:33	17° <u>♂</u> 56'24		retrograde	-497 Feb 11 j 08:38	5° <u>♂</u> 18'51	
opposition	-505 Apr 13 j 12:01	16° <u>♂</u> 34'25	2°03'55	opposition	-497 May 01 j 13:53	3° <u>♂</u> 56'37	1°56'52
min. Earth dist.	-505 Apr 14 j 05:44	16° <u>♂</u> 33'13	29.32967 AU	min. Earth dist.	-497 May 02 j 00:37	3° <u>♂</u> 55'53	29.32002 AU
direct	-505 Jul 03 j 18:24	15° <u>♂</u> 10'04		direct	-497 Jul 21 j 13:35	2° <u>♂</u> 32'44	
max. Earth dist.	-505 Oct 16 j 07:48	17° <u>♂</u> 38'17	31.32673 AU				
conjunction	-505 Oct 17 j 00:57	17° <u>♂</u> 39'53	1°55'55	conjunction	-497 Nov 03 j 02:10	5° <u>♂</u> 01'54	1°48'39
minimum elong	-505 Oct 17 j 00:57	17° <u>♂</u> 39'53	1°55'55	minimum elong	-497 Nov 03 j 02:10	5° <u>♂</u> 01'54	1°48'39
retrograde	-504 Jan 27 j 06:55	20° <u>♂</u> 06'44		max. Earth dist.	-497 Nov 02 j 14:37	5° <u>♂</u> 00'48	31.31765 AU
opposition	-504 Apr 15 j 00:04	18° <u>♂</u> 44'41	2°03'39	retrograde	-496 Feb 13 j 20:32	7° <u>♂</u> 29'34	
min. Earth dist.	-504 Apr 15 j 16:39	18° <u>♂</u> 43'33	29.32659 AU	opposition	-496 May 03 j 02:29	6° <u>♂</u> 07'17	1°55'13
direct	-504 Jul 05 j 08:02	17° <u>♂</u> 20'21		min. Earth dist.	-496 May 03 j 13:23	6° <u>♂</u> 06'33	29.31728 AU
				direct	-496 Jul 23 j 01:01	4° <u>♂</u> 43'29	
conjunction	-504 Oct 18 j 10:02	19° <u>♂</u> 50'03	1°55'35	conjunction	-496 Nov 04 j 11:27	7° <u>♂</u> 12'34	1°47'01
minimum elong	-504 Oct 18 j 10:02	19° <u>♂</u> 50'03	1°55'34	minimum elong	-496 Nov 04 j 11:28	7° <u>♂</u> 12'34	1°47'01
max. Earth dist.	-504 Oct 17 j 16:53	19° <u>♂</u> 48'26	31.32394 AU	max. Earth dist.	-496 Nov 04 j 01:13	7° <u>♂</u> 11'36	31.31419 AU
retrograde	-503 Jan 28 j 17:11	22° <u>♂</u> 16'57		retrograde	-495 Feb 15 j 06:54	9° <u>♂</u> 40'20	
opposition	-503 Apr 17 j 12:08	20° <u>♂</u> 54'50	2°03'13	opposition	-495 May 05 j 15:05	8° <u>♂</u> 18'02	1°53'24
min. Earth dist.	-503 Apr 18 j 03:51	20° <u>♂</u> 53'46	29.32424 AU	min. Earth dist.	-495 May 06 j 01:08	8° <u>♂</u> 17'21	29.31290 AU
direct	-503 Jul 07 j 18:33	19° <u>♂</u> 30'31		direct	-495 Jul 25 j 14:38	6° <u>♂</u> 54'16	
conjunction	-503 Oct 20 j 19:18	22° <u>♂</u> 00'07	1°55'05	conjunction	-495 Nov 06 j 20:36	9° <u>♂</u> 23'16	1°45'15
minimum elong	-503 Oct 20 j 19:18	22° <u>♂</u> 00'07	1°55'04	minimum elong	-495 Nov 06 j 20:36	9° <u>♂</u> 23'16	1°45'14
max. Earth dist.	-503 Oct 20 j 04:06	21° <u>♂</u> 58'41	31.32199 AU	max. Earth dist.	-495 Nov 06 j 09:54	9° <u>♂</u> 22'15	31.30912 AU
retrograde	-502 Jan 31 j 01:03	24° <u>♂</u> 27'05		retrograde	-494 Feb 17 j 18:03	11° <u>♂</u> 51'09	
opposition	-502 Apr 20 j 00:13	23° <u>♂</u> 04'55	2°02'36	opposition	-494 May 08 j 03:40	10° <u>♂</u> 28'46	1°51'25
min. Earth dist.	-502 Apr 20 j 15:18	23° <u>♂</u> 03'54	29.32269 AU	min. Earth dist.	-494 May 08 j 13:11	10° <u>♂</u> 28'08	29.30715 AU
direct	-502 Jul 10 j 06:41	21° <u>♂</u> 40'40		direct	-494 Jul 28 j 01:23	9° <u>♂</u> 05'02	
conjunction	-502 Oct 23 j 04:23	24° <u>♂</u> 10'10	1°54'25	conjunction	-494 Nov 09 j 05:52	11° <u>♂</u> 33'56	1°43'19
minimum elong	-502 Oct 23 j 04:23	24° <u>♂</u> 10'10	1°54'24	minimum elong	-494 Nov 09 j 05:52	11° <u>♂</u> 33'56	1°43'18
max. Earth dist.	-502 Oct 22 j 13:05	24° <u>♂</u> 08'43	31.32105 AU	max. Earth dist.	-494 Nov 08 j 20:52	11° <u>♂</u> 33'05	31.30281 AU
retrograde	-501 Feb 02 j 12:28	26° <u>♂</u> 37'13		retrograde	-493 Feb 20 j 02:37	14° <u>♂</u> 01'55	
opposition	-501 Apr 22 j 12:24	25° <u>♂</u> 15'02	2°01'48	opposition	-493 May 10 j 16:25	12° <u>♂</u> 39'28	1°49'17
min. Earth dist.	-501 Apr 23 j 01:49	25° <u>♂</u> 14'08	29.32217 AU	min. Earth dist.	-493 May 11 j 01:32	12° <u>♂</u> 38'51	29.30028 AU
direct	-501 Jul 12 j 16:26	23° <u>♂</u> 50'51		direct	-493 Jul 30 j 14:09	11° <u>♂</u> 15'45	
conjunction	-501 Oct 25 j 13:29	26° <u>♂</u> 20'16	1°53'35	conjunction	-493 Nov 11 j 14:47	13° <u>♂</u> 44'33	1°41'15
minimum elong	-501 Oct 25 j 13:29	26° <u>♂</u> 20'16	1°53'35	minimum elong	-493 Nov 11 j 14:47	13° <u>♂</u> 44'33	1°41'14
max. Earth dist.	-501 Oct 25 j 00:00	26° <u>♂</u> 19'00	31.32082 AU	max. Earth dist.	-493 Nov 11 j 05:38	13° <u>♂</u> 43'41	31.29576 AU
retrograde	-500 Feb 04 j 22:07	28° <u>♂</u> 47'27			-493 Dec 16 j 12:28	15° <u>♂</u>	
opposition	-500 Apr 24 j 00:45	27° <u>♂</u> 25'15	2°00'50	retrograde	-492 Feb 22 j 14:11	16° <u>♂</u> 12'38	
min. Earth dist.	-500 Apr 24 j 14:18	27° <u>♂</u> 24'20	29.32211 AU		-492 May 06 j 01:44	15° <u>♂</u> ♂	
direct	-500 Jul 14 j 03:21	26° <u>♂</u> 01'09		opposition	-492 May 12 j 05:01	14° <u>♂</u> 50'06	1°46'59
				min. Earth dist.	-492 May 12 j 12:34	14° <u>♂</u> 49'35	29.29307 AU
conjunction	-500 Oct 26 j 22:36	28° <u>♂</u> 30'29	1°52'36	direct	-492 Aug 01 j 00:34	13° <u>♂</u> 26'23	
minimum elong	-500 Oct 26 j 22:36	28° <u>♂</u> 30'29	1°52'35		-492 Oct 19 j 02:02	15° <u>♂</u>	
max. Earth dist.	-500 Oct 26 j 09:20	28° <u>♂</u> 29'14	31.32095 AU				
	-500 Dec 08 j 10:39	0° <u>♂</u>		conjunction	-492 Nov 12 j 23:53	15° <u>♂</u> 55'05	1°39'02
retrograde	-499 Feb 06 j 10:05	0° <u>♂</u> 57'46		minimum elong	-492 Nov 12 j 23:53	15° <u>♂</u> 55'05	1°39'01
	-499 Apr 11 j 05:37	30° <u>♂</u> ♂		max. Earth dist.	-492 Nov 12 j 16:25	15° <u>♂</u> 54'23	31.28851 AU
opposition	-499 Apr 26 j 12:50	29° <u>♂</u> 35'34	1°59'41	retrograde	-491 Feb 23 j 23:37	18° <u>♂</u> 23'17	
min. Earth dist.	-499 Apr 27 j 00:43	29° <u>♂</u> 34'46	29.32210 AU	opposition	-491 May 14 j 17:34	17° <u>♂</u> 00'40	1°44'33
direct	-499 Jul 16 j 14:37	28° <u>♂</u> 11'32		min. Earth dist.	-491 May 15 j 01:06	17° <u>♂</u> 00'10	29.28598 AU
	-499 Oct 11 j 00:38	0° <u>♂</u>		direct	-491 Aug 03 j 11:47	15° <u>♂</u> 36'59	
conjunction	-499 Oct 29 j 07:50	0° <u>♂</u> 40'50	1°51'26	conjunction	-491 Nov 15 j 08:53	18° <u>♂</u> 05'35	1°36'40
minimum elong	-499 Oct 29 j 07:50	0° <u>♂</u> 40'50	1°51'27	minimum elong	-491 Nov 15 j 08:53	18° <u>♂</u> 05'35	1°36'40
max. Earth dist.	-499 Oct 28 j 19:30	0° <u>♂</u> 39'40	31.32071 AU	max. Earth dist.	-491 Nov 15 j 02:03	18° <u>♂</u> 04'56	31.28186 AU
retrograde	-498 Feb 08 j 21:37	3° <u>♂</u> 08'15		retrograde	-490 Feb 26 j 11:29	20° <u>♂</u> 33'54	
opposition	-498 Apr 29 j 01:22	1° <u>♂</u> 46'02	1°58'22	opposition	-490 May 17 j 06:11	19° <u>♂</u> 11'14	1°41'58
min. Earth dist.	-498 Apr 29 j 13:40	1° <u>♂</u> 45'12	29.32157 AU	min. Earth dist.	-490 May 17 j 11:35	19° <u>♂</u> 10'52	29.27964 AU
direct	-498 Jul 19 j 00:54	0° <u>♂</u> 22'05		direct	-490 Aug 05 j 22:45	17° <u>♂</u> 47'36	

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Attention, astronomical year style is used: The year -490 in astronomical counting style is the year 491 BCE in historical counting style.

conjunction	-490 Nov 17 j 17:47	20° ℳ 16'07	1°34'10	conjunction	-482 Dec 04 j 19:11	7° ♊ 44'56	1°09'33
minimum elong	-490 Nov 17 j 17:47	20° ℳ 16'07	1°34'10	minimum elong	-482 Dec 04 j 19:12	7° ♊ 44'56	1°09'33
max. Earth dist.	-490 Nov 17 j 12:11	20° ℳ 15'36	31.27592 AU	max. Earth dist.	-482 Dec 04 j 19:50	7° ♊ 44'59	31.22537 AU
retrograde	-489 Feb 28 j 23:09	22° ℳ 44'36		retrograde	-481 Mar 18 j 18:49	10° ♊ 14'36	
opposition	-489 May 19 j 19:01	21° ℳ 21'52	1°39'13	opposition	-481 Jun 07 j 02:23	8° ♊ 51'28	1°12'24
min. Earth dist.	-489 May 20 j 00:18	21° ℳ 21'31	29.27415 AU	min. Earth dist.	-481 Jun 07 j 00:30	8° ♊ 51'36	29.22029 AU
direct	-489 Aug 08 j 08:02	19° ℳ 58'17		direct	-481 Aug 26 j 06:00	7° ♊ 28'15	
conjunction	-489 Nov 20 j 02:49	22° ℳ 26'45	1°31'32	conjunction	-481 Dec 07 j 04:32	9° ♊ 56'13	1°05'59
minimum elong	-489 Nov 20 j 02:49	22° ℳ 26'45	1°31'32	minimum elong	-481 Dec 07 j 04:32	9° ♊ 56'13	1°05'59
max. Earth dist.	-489 Nov 19 j 22:33	22° ℳ 26'21	31.27093 AU	max. Earth dist.	-481 Dec 07 j 05:53	9° ♊ 56'21	31.21422 AU
retrograde	-488 Mar 02 j 10:33	24° ℳ 55'22		retrograde	-480 Mar 20 j 06:10	12° ♊ 26'01	
opposition	-488 May 21 j 07:37	23° ℳ 32'37	1°36'20	opposition	-480 Jun 08 j 15:23	11° ♊ 02'46	1°08'32
min. Earth dist.	-488 May 21 j 10:54	23° ℳ 32'24	29.26933 AU	min. Earth dist.	-480 Jun 08 j 13:46	11° ♊ 02'53	29.20887 AU
direct	-488 Aug 09 j 20:12	22° ℳ 09'06		direct	-480 Aug 27 j 15:40	9° ♊ 39'32	
conjunction	-488 Nov 21 j 11:46	24° ℳ 37'32	1°28'46	conjunction	-480 Dec 08 j 13:51	12° ♊ 07'24	1°02'19
minimum elong	-488 Nov 21 j 11:47	24° ℳ 37'32	1°28'46	minimum elong	-480 Dec 08 j 13:51	12° ♊ 07'25	1°02'18
max. Earth dist.	-488 Nov 21 j 07:49	24° ℳ 37'09	31.26634 AU	max. Earth dist.	-480 Dec 08 j 16:31	12° ♊ 07'40	31.20275 AU
retrograde	-487 Mar 04 j 23:40	27° ℳ 06'19		retrograde	-479 Mar 22 j 17:46	14° ♊ 37'19	
opposition	-487 May 23 j 20:26	25° ℳ 43'31	1°33'18	opposition	-479 Jun 11 j 04:16	13° ♊ 13'58	1°04'34
min. Earth dist.	-487 May 23 j 23:29	25° ℳ 43'19	29.26483 AU	min. Earth dist.	-479 Jun 11 j 00:42	13° ♊ 14'12	29.19732 AU
direct	-487 Aug 12 j 07:14	24° ℳ 20'05		direct	-479 Aug 30 j 04:11	11° ♊ 50'42	
conjunction	-487 Nov 23 j 20:52	26° ℳ 48'28	1°25'52	conjunction	-479 Dec 10 j 22:58	14° ♊ 18'31	0°58'33
minimum elong	-487 Nov 23 j 20:52	26° ℳ 48'28	1°25'51	minimum elong	-479 Dec 10 j 22:59	14° ♊ 18'31	0°58'32
max. Earth dist.	-487 Nov 23 j 18:44	26° ℳ 48'16	31.26182 AU	max. Earth dist.	-479 Dec 11 j 01:56	14° ♊ 18'48	31.19141 AU
retrograde	-486 Mar 07 j 11:03	29° ℳ 17'24		retrograde	-478 Mar 25 j 06:52	16° ♊ 48'34	
opposition	-486 May 26 j 09:17	27° ℳ 54'36	1°30'08	opposition	-478 Jun 13 j 17:18	15° ♊ 25'06	1°00'30
min. Earth dist.	-486 May 26 j 11:08	27° ℳ 54'28	29.26002 AU	min. Earth dist.	-478 Jun 13 j 13:19	15° ♊ 25'23	29.18640 AU
direct	-486 Aug 14 j 20:19	26° ℳ 31'14		direct	-478 Sep 01 j 14:43	14° ♊ 01'51	
conjunction	-486 Nov 26 j 05:56	28° ℳ 59'34	1°22'50	conjunction	-478 Dec 13 j 08:21	16° ♊ 29'37	0°54'42
minimum elong	-486 Nov 26 j 05:57	28° ℳ 59'34	1°22'49	minimum elong	-478 Dec 13 j 08:22	16° ♊ 29'37	0°54'42
max. Earth dist.	-486 Nov 26 j 03:39	28° ℳ 59'21	31.25686 AU	max. Earth dist.	-478 Dec 13 j 13:26	16° ♊ 30'06	31.18095 AU
retrograde	-486 Dec 23 j 14:49	0° ♊		retrograde	-477 Mar 27 j 18:25	18° ♊ 59'49	
opposition	-485 Mar 09 j 23:07	1° ♊ 28'41		opposition	-477 Jun 16 j 06:14	17° ♊ 36'17	0°56'21
min. Earth dist.	-485 May 28 j 22:16	0° ♊ 05'50	1°26'49	min. Earth dist.	-477 Jun 16 j 00:41	17° ♊ 36'39	29.17635 AU
direct	-485 May 28 j 23:23	0° ♊ 05'46	29.25473 AU	direct	-477 Sep 04 j 03:13	16° ♊ 13'03	
conjunction	-485 Jun 01 j 13:04	30° ♋		conjunction	-477 Dec 15 j 17:33	18° ♊ 40'46	0°50'47
direct	-485 Aug 17 j 06:36	28° ℳ 42'32		minimum elong	-477 Dec 15 j 17:33	18° ♊ 40'46	0°50'46
conjunction	-485 Nov 28 j 15:12	1° ♊ 10'49	1°19'41	max. Earth dist.	-477 Dec 15 j 22:44	18° ♊ 41'15	31.17149 AU
minimum elong	-485 Nov 28 j 15:12	1° ♊ 10'49	1°19'40	retrograde	-476 Mar 29 j 07:15	21° ♊ 11'08	
max. Earth dist.	-485 Nov 28 j 14:39	1° ♊ 10'46	31.25104 AU	opposition	-476 Jun 17 j 19:11	19° ♊ 47'33	0°52'06
retrograde	-484 Mar 11 j 08:51	3° ♊ 40'05		min. Earth dist.	-476 Jun 17 j 12:36	19° ♊ 47'59	29.16737 AU
opposition	-484 May 30 j 11:19	2° ♊ 17'12	1°23'24	direct	-476 Sep 05 j 13:23	18° ♊ 24'22	
min. Earth dist.	-484 May 30 j 12:06	2° ♊ 17'08	29.24823 AU	conjunction	-476 Dec 17 j 03:02	20° ♊ 52'04	0°46'46
direct	-484 Aug 18 j 19:56	0° ♊ 53'57		minimum elong	-476 Dec 17 j 03:03	20° ♊ 52'04	0°46'46
conjunction	-484 Nov 30 j 00:29	3° ♊ 22'10	1°16'25	max. Earth dist.	-476 Dec 17 j 10:13	20° ♊ 52'45	31.16287 AU
minimum elong	-484 Nov 30 j 00:29	3° ♊ 22'10	1°16'24	retrograde	-475 Mar 31 j 17:56	23° ♊ 22'36	
max. Earth dist.	-484 Nov 29 j 23:32	3° ♊ 22'05	31.24397 AU	opposition	-475 Jun 20 j 08:02	21° ♊ 58'59	0°47'47
retrograde	-483 Mar 13 j 21:35	5° ♊ 51'34		min. Earth dist.	-475 Jun 20 j 00:47	21° ♊ 59'28	29.15902 AU
opposition	-483 Jun 02 j 00:10	4° ♊ 28'38	1°19'51	direct	-475 Sep 08 j 02:17	20° ♊ 35'51	
min. Earth dist.	-483 Jun 01 j 23:41	4° ♊ 28'39	29.24039 AU	conjunction	-475 Dec 19 j 12:25	23° ♊ 03'33	0°42'42
direct	-483 Aug 21 j 07:02	3° ♊ 05'24		minimum elong	-475 Dec 19 j 12:26	23° ♊ 03'33	0°42'41
conjunction	-483 Dec 02 j 09:56	5° ♊ 33'34	1°13'02	max. Earth dist.	-475 Dec 19 j 19:45	23° ♊ 04'15	31.15494 AU
minimum elong	-483 Dec 02 j 09:57	5° ♊ 33'34	1°13'02	retrograde	-474 Apr 03 j 07:43	25° ♊ 34'17	
max. Earth dist.	-483 Dec 02 j 10:11	5° ♊ 33'35	31.23534 AU	opposition	-474 Jun 22 j 21:02	24° ♊ 10'38	0°43'23
retrograde	-482 Mar 16 j 07:15	8° ♊ 03'06		min. Earth dist.	-474 Jun 22 j 12:08	24° ♊ 11'14	29.15124 AU
opposition	-482 Jun 04 j 13:21	6° ♊ 40'05	1°16'11	direct	-474 Sep 10 j 13:08	22° ♊ 47'34	
min. Earth dist.	-482 Jun 04 j 13:10	6° ♊ 40'05	29.23096 AU	conjunction	-474 Dec 21 j 21:56	25° ♊ 15'15	0°38'33
direct	-482 Aug 23 j 18:43	5° ♊ 16'52		minimum elong	-474 Dec 21 j 21:56	25° ♊ 15'15	0°38'32
				max. Earth dist.	-474 Dec 22 j 06:43	25° ♊ 16'05	31.14717 AU

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 28

Attention, astronomical year style is used: The year -473 in astronomical counting style is the year 474 BCE in historical counting style.

retrograde	-473 Apr 05 j 17:58	27° 2 46'11		conjunction	-465 Jan 08 j 05:18	12° 3 53'22	0°03'52
opposition	-473 Jun 25 j 10:13	26° 2 22'31	0°38'55	minimum elong	-465 Jan 08 j 05:17	12° 3 53'22	0°03'52
min. Earth dist.	-473 Jun 25 j 01:26	26° 2 23'06	29.14341 AU	behind sun begin	-465 Jan 07 j 22:57	12° 3 52'48	
direct	-473 Sep 13 j 00:21	24° 2 59'31		behind sun end	-465 Jan 08 j 11:38	12° 3 53'57	
				max. Earth dist.	-465 Jan 08 j 19:13	12° 3 54'41	31.06138 AU
conjunction	-473 Dec 24 j 07:39	27° 2 27'12	0°34'20	retrograde	-465 Apr 23 j 23:50	15° 3 25'30	
minimum elong	-473 Dec 24 j 07:39	27° 2 27'12	0°34'20	opposition	-465 Jul 13 j 18:34	14° 3 01'10	0°01'39
max. Earth dist.	-473 Dec 24 j 17:03	27° 2 28'05	31.13927 AU	min. Earth dist.	-465 Jul 13 j 03:22	14° 3 02'12	29.05608 AU
retrograde	-472 Apr 07 j 06:07	29° 2 58'19		direct	-465 Sep 30 j 18:08	12° 3 38'09	
opposition	-472 Jun 26 j 23:04	28° 2 34'36	0°34'23	desc. node	-465 Nov 18 j 15:28	13° 3 17'53	
min. Earth dist.	-472 Jun 26 j 12:42	28° 2 35'19	29.13517 AU				
direct	-472 Sep 14 j 11:04	27° 2 11'39		conjunction	-464 Jan 10 j 15:30	15° 3 05'38	0°00'-39
				minimum elong	-464 Jan 10 j 15:30	15° 3 05'38	0°00'40
conjunction	-472 Dec 25 j 17:27	29° 2 39'21	0°30'05	behind sun begin	-464 Jan 10 j 09:06	15° 3 05'03	
minimum elong	-472 Dec 25 j 17:27	29° 2 39'21	0°30'04	behind sun end	-464 Jan 10 j 21:54	15° 3 06'12	
max. Earth dist.	-472 Dec 26 j 03:15	29° 2 40'16	31.13055 AU	max. Earth dist.	-464 Jan 11 j 06:49	15° 3 07'04	31.05080 AU
	-471 Jan 03 j 19:42	0° 3		retrograde	-464 Apr 25 j 10:18	17° 3 37'53	
retrograde	-471 Apr 09 j 18:12	2° 3 10'39		opposition	-464 Jul 15 j 07:24	16° 3 13'30	0°-3'-5
opposition	-471 Jun 29 j 12:18	0° 3 46'54	0°29'49	min. Earth dist.	-464 Jul 14 j 16:10	16° 3 14'32	29.04614 AU
min. Earth dist.	-471 Jun 29 j 02:24	0° 3 47'34	29.12601 AU	direct	-464 Oct 02 j 05:37	14° 3 50'29	
	-471 Jul 30 j 02:29	30° 2					
direct	-471 Sep 16 j 20:08	29° 2 23'59		conjunction	-463 Jan 12 j 01:45	17° 3 17'57	0°-5'-8
	-471 Nov 02 j 13:28	0° 3		minimum elong	-463 Jan 12 j 01:44	17° 3 17'57	0°05'09
				behind sun begin	-463 Jan 11 j 19:31	17° 3 17'23	
conjunction	-471 Dec 28 j 03:20	1° 3 51'39	0°25'47	behind sun end	-463 Jan 12 j 07:58	17° 3 18'31	
minimum elong	-471 Dec 28 j 03:20	1° 3 51'39	0°25'47	max. Earth dist.	-463 Jan 12 j 17:54	17° 3 19'28	31.04152 AU
max. Earth dist.	-471 Dec 28 j 14:13	1° 3 52'41	31.12086 AU	retrograde	-463 Apr 27 j 23:00	19° 3 50'21	
retrograde	-470 Apr 12 j 06:36	4° 3 23'08		opposition	-463 Jul 17 j 20:14	18° 3 25'55	0°-7'-50
opposition	-470 Jul 02 j 01:25	2° 3 59'19	0°25'11	min. Earth dist.	-463 Jul 17 j 03:09	18° 3 27'05	29.03737 AU
min. Earth dist.	-470 Jul 01 j 13:57	3° 3 00'06	29.11562 AU	direct	-463 Oct 04 j 17:06	17° 3 02'55	
direct	-470 Sep 19 j 08:35	1° 3 36'24					
				conjunction	-462 Jan 14 j 11:53	19° 3 30'24	0°-9'-33
conjunction	-470 Dec 30 j 13:16	4° 3 04'03	0°21'26	minimum elong	-462 Jan 14 j 11:53	19° 3 30'24	0°09'34
minimum elong	-470 Dec 30 j 13:17	4° 3 04'03	0°21'26	behind sun begin	-462 Jan 14 j 06:32	19° 3 29'55	
max. Earth dist.	-470 Dec 30 j 23:49	4° 3 05'03	31.10989 AU	behind sun end	-462 Jan 14 j 17:14	19° 3 30'53	
retrograde	-469 Apr 14 j 20:26	6° 3 35'41		max. Earth dist.	-462 Jan 15 j 04:42	19° 3 31'59	31.03316 AU
opposition	-469 Jul 04 j 14:37	5° 3 11'47	0°20'31	retrograde	-462 Apr 30 j 11:15	22° 3 02'59	
min. Earth dist.	-469 Jul 04 j 03:19	5° 3 12'33	29.10415 AU	opposition	-462 Jul 20 j 09:18	20° 3 38'30	0°-12'-34
direct	-469 Sep 21 j 18:31	3° 3 48'51		min. Earth dist.	-462 Jul 19 j 16:27	20° 3 39'39	29.02951 AU
				direct	-462 Oct 07 j 02:47	19° 3 15'33	
conjunction	-468 Jan 01 j 23:21	6° 3 16'28	0°17'04				
minimum elong	-468 Jan 01 j 23:22	6° 3 16'28	0°17'04	conjunction	-461 Jan 16 j 22:24	21° 3 43'02	0°-13'-58
max. Earth dist.	-468 Jan 02 j 11:31	6° 3 17'37	31.09795 AU	minimum elong	-461 Jan 16 j 22:24	21° 3 43'02	0°14'00
retrograde	-468 Apr 16 j 08:19	8° 3 48'14		behind sun begin	-461 Jan 16 j 19:03	21° 3 42'44	
opposition	-468 Jul 06 j 03:38	7° 3 24'13	0°15'50	behind sun end	-461 Jan 17 j 01:44	21° 3 43'20	
min. Earth dist.	-468 Jul 05 j 15:19	7° 3 25'03	29.09174 AU	max. Earth dist.	-461 Jan 17 j 16:36	21° 3 44'45	31.02567 AU
direct	-468 Sep 23 j 06:41	6° 3 01'16		retrograde	-461 May 02 j 23:32	24° 3 15'47	
				opposition	-461 Jul 22 j 22:06	22° 3 51'17	0°-17'-18
conjunction	-467 Jan 03 j 09:16	8° 3 28'50	0°12'41	min. Earth dist.	-461 Jul 22 j 03:40	22° 3 52'33	29.02219 AU
minimum elong	-467 Jan 03 j 09:16	8° 3 28'50	0°12'40	direct	-461 Oct 09 j 14:28	21° 3 28'21	
behind sun begin	-467 Jan 03 j 05:07	8° 3 28'27					
behind sun end	-467 Jan 03 j 13:24	8° 3 29'13		conjunction	-460 Jan 19 j 08:56	23° 3 55'53	0°-18'-23
max. Earth dist.	-467 Jan 03 j 21:08	8° 3 29'57	31.08538 AU	minimum elong	-460 Jan 19 j 08:55	23° 3 55'53	0°18'24
retrograde	-467 Apr 18 j 21:48	11° 3 00'43		max. Earth dist.	-460 Jan 20 j 02:49	23° 3 57'35	31.01839 AU
opposition	-467 Jul 08 j 16:36	9° 3 36'35	0°11'07	retrograde	-460 May 04 j 13:08	26° 3 28'48	
min. Earth dist.	-467 Jul 08 j 03:40	9° 3 37'28	29.07921 AU	opposition	-460 Jul 24 j 11:06	25° 3 04'17	0°-22'-1
direct	-467 Sep 25 j 17:22	8° 3 13'36		min. Earth dist.	-460 Jul 23 j 16:56	25° 3 05'32	29.01495 AU
				direct	-460 Oct 10 j 23:36	23° 3 41'24	
conjunction	-466 Jan 05 j 19:20	10° 3 41'08	0°08'17				
minimum elong	-466 Jan 05 j 19:21	10° 3 41'08	0°08'16	conjunction	-459 Jan 20 j 19:43	26° 3 08'58	0°-22'-46
behind sun begin	-466 Jan 05 j 13:40	10° 3 40'37		minimum elong	-459 Jan 20 j 19:43	26° 3 08'58	0°22'48
behind sun end	-466 Jan 06 j 01:02	10° 3 41'39		max. Earth dist.	-459 Jan 21 j 15:09	26° 3 10'49	31.01089 AU
max. Earth dist.	-466 Jan 06 j 09:05	10° 3 42'25	31.07296 AU	retrograde	-459 May 07 j 01:37	28° 3 42'03	
retrograde	-466 Apr 21 j 09:51	13° 3 13'07		opposition	-459 Jul 26 j 23:59	27° 3 17'31	0°-26'-42
opposition	-466 Jul 11 j 05:38	11° 3 48'53	0°06'24	min. Earth dist.	-459 Jul 26 j 05:01	27° 3 18'49	29.00711 AU
min. Earth dist.	-466 Jul 10 j 16:02	11° 3 49'49	29.06711 AU	direct	-459 Oct 13 j 11:04	25° 3 54'39	
direct	-466 Sep 28 j 06:51	10° 3 25'53					

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Attention, astronomical year style is used: The year -458 in astronomical counting style is the year 459 BCE in historical counting style.

conjunction	-458 Jan 23 j 06:36	28° $\overline{22}$ '16	0°-27'-8	direct	-451 Oct 31 j 05:39	13° \approx 43'16	
minimum elong	-458 Jan 23 j 06:36	28° $\overline{22}$ '16	0°27'09		-450 Jan 08 j 10:52	15° \approx	
max. Earth dist.	-458 Jan 24 j 01:20	28° $\overline{24}$ '03	31.00268 AU				
	-458 Mar 10 j 20:53	0° \approx		conjunction	-450 Feb 10 j 00:43	16° \approx 11'06	-1°00'-5
retrograde	-458 May 09 j 16:29	0° \approx 55'31		minimum elong	-450 Feb 10 j 00:43	16° \approx 11'06	1°00'06
	-458 Jul 11 j 11:46	30° \overline{R} $\overline{2}$		max. Earth dist.	-450 Feb 11 j 00:07	16° \approx 13'18	30.92193 AU
opposition	-458 Jul 29 j 13:03	29° $\overline{23}$ '56	0°-31'-21	retrograde	-450 May 27 j 23:09	18° \approx 45'15	
min. Earth dist.	-458 Jul 28 j 17:58	29° $\overline{23}$ '15	28.99849 AU	opposition	-450 Aug 16 j 19:08	17° \approx 20'10	-1°-6'-19
direct	-458 Oct 15 j 21:23	28° $\overline{20}$ '05		min. Earth dist.	-450 Aug 15 j 20:36	17° \approx 21'44	28.91903 AU
	-457 Jan 09 j 21:20	0° \approx		direct	-450 Nov 02 j 16:40	15° \approx 57'09	
conjunction	-457 Jan 25 j 17:42	0° \approx 35'44	0°-31'-27	conjunction	-449 Feb 12 j 12:16	18° \approx 25'01	-1°-3'-52
minimum elong	-457 Jan 25 j 17:42	0° \approx 35'44	0°31'29	minimum elong	-449 Feb 12 j 12:15	18° \approx 25'01	1°03'54
max. Earth dist.	-457 Jan 26 j 13:38	0° \approx 37'37	30.99337 AU	max. Earth dist.	-449 Feb 13 j 11:08	18° \approx 27'11	30.91520 AU
retrograde	-457 May 12 j 05:45	3° \approx 09'07		retrograde	-449 May 30 j 13:36	20° \approx 59'18	
min. Earth dist.	-457 Jul 31 j 07:01	1° \approx 45'48	28.98857 AU	min. Earth dist.	-449 Aug 18 j 09:08	19° \approx 35'46	28.91277 AU
opposition	-457 Aug 01 j 02:05	1° \approx 44'29	0°-35'-57	opposition	-449 Aug 19 j 07:47	19° \approx 34'12	-1°-10'-19
direct	-457 Oct 18 j 10:24	0° \approx 21'37		direct	-449 Nov 05 j 02:51	18° \approx 11'11	
conjunction	-456 Jan 28 j 04:52	2° \approx 49'18	0°-35'-44	conjunction	-448 Feb 15 j 00:11	20° \approx 39'08	-1°-7'-34
minimum elong	-456 Jan 28 j 04:52	2° \approx 49'18	0°35'45	minimum elong	-448 Feb 15 j 00:10	20° \approx 39'08	1°07'34
max. Earth dist.	-456 Jan 29 j 00:13	2° \approx 51'08	30.98296 AU	max. Earth dist.	-448 Feb 16 j 00:20	20° \approx 41'25	30.90909 AU
retrograde	-456 May 13 j 20:20	5° \approx 22'48		retrograde	-448 Jun 01 j 02:43	23° \approx 13'31	
opposition	-456 Aug 02 j 14:51	3° \approx 58'06	0°-40'-30	opposition	-448 Aug 20 j 20:15	21° \approx 48'25	-1°-14'-12
min. Earth dist.	-456 Aug 01 j 19:01	3° \approx 59'27	28.97769 AU	min. Earth dist.	-448 Aug 19 j 21:40	21° \approx 49'59	28.90686 AU
direct	-456 Oct 19 j 21:46	2° \approx 35'12		direct	-448 Nov 06 j 14:48	20° \approx 25'25	
conjunction	-455 Jan 29 j 16:04	5° \approx 02'54	0°-39'-58	conjunction	-447 Feb 16 j 12:06	22° \approx 53'26	-1°-11'-9
minimum elong	-455 Jan 29 j 16:04	5° \approx 02'54	0°39'59	minimum elong	-447 Feb 16 j 12:05	22° \approx 53'26	1°11'11
max. Earth dist.	-455 Jan 30 j 12:10	5° \approx 04'48	30.97161 AU	max. Earth dist.	-447 Feb 17 j 11:40	22° \approx 55'40	30.90331 AU
retrograde	-455 May 16 j 08:03	7° \approx 36'30		retrograde	-447 Jun 03 j 17:37	25° \approx 27'56	
min. Earth dist.	-455 Aug 04 j 08:26	6° \approx 13'03	28.96618 AU	min. Earth dist.	-447 Aug 22 j 09:39	24° \approx 04'26	28.90107 AU
opposition	-455 Aug 05 j 03:47	6° \approx 11'43	0°-44'-59	opposition	-447 Aug 23 j 08:51	24° \approx 02'50	-1°-18'00
direct	-455 Oct 22 j 09:49	4° \approx 48'47		direct	-447 Nov 09 j 01:24	22° \approx 39'49	
conjunction	-454 Feb 01 j 03:10	7° \approx 16'29	0°-44'-7	conjunction	-446 Feb 19 j 00:09	25° \approx 07'55	-1°-14'-39
minimum elong	-454 Feb 01 j 03:10	7° \approx 16'29	0°44'09	minimum elong	-446 Feb 19 j 00:09	25° \approx 07'55	1°14'39
max. Earth dist.	-454 Feb 01 j 23:47	7° \approx 18'26	30.96015 AU	max. Earth dist.	-446 Feb 20 j 00:13	25° \approx 10'12	30.89713 AU
retrograde	-454 May 18 j 21:54	9° \approx 50'11		retrograde	-446 Jun 06 j 07:00	27° \approx 42'32	
opposition	-454 Aug 07 j 16:33	8° \approx 25'19	0°-49'-25	opposition	-446 Aug 25 j 21:33	26° \approx 17'24	-1°-21'-40
min. Earth dist.	-454 Aug 06 j 19:46	8° \approx 26'45	28.95487 AU	min. Earth dist.	-446 Aug 24 j 23:14	26° \approx 18'56	28.89462 AU
direct	-454 Oct 24 j 22:15	7° \approx 02'21		direct	-446 Nov 11 j 13:38	24° \approx 54'23	
conjunction	-453 Feb 03 j 14:25	9° \approx 30'03	0°-48'-14	conjunction	-445 Feb 21 j 12:33	27° \approx 22'32	-1°-18'-1
minimum elong	-453 Feb 03 j 14:25	9° \approx 30'03	0°48'15	minimum elong	-445 Feb 21 j 12:33	27° \approx 22'32	1°18'02
max. Earth dist.	-453 Feb 04 j 11:18	9° \approx 32'02	30.94899 AU	max. Earth dist.	-445 Feb 22 j 12:26	27° \approx 24'48	30.89027 AU
retrograde	-453 May 21 j 10:15	12° \approx 03'52		retrograde	-445 Jun 08 j 22:25	29° \approx 57'13	
min. Earth dist.	-453 Aug 09 j 09:04	10° \approx 40'19	28.94426 AU	min. Earth dist.	-445 Aug 27 j 10:56	28° \approx 33'39	28.88725 AU
opposition	-453 Aug 10 j 05:16	10° \approx 38'55	0°-53'-45	opposition	-445 Aug 28 j 09:58	28° \approx 32'03	-1°-25'-13
direct	-453 Oct 27 j 08:35	9° \approx 15'55		direct	-445 Nov 14 j 02:34	27° \approx 09'00	
conjunction	-452 Feb 06 j 01:51	11° \approx 43'39	0°-52'-15	conjunction	-444 Feb 24 j 00:59	29° \approx 37'13	-1°-21'-17
minimum elong	-452 Feb 06 j 01:51	11° \approx 43'39	0°52'16	minimum elong	-444 Feb 24 j 00:59	29° \approx 37'13	1°21'17
max. Earth dist.	-452 Feb 06 j 23:56	11° \approx 45'45	30.93885 AU	max. Earth dist.	-444 Feb 25 j 00:19	29° \approx 39'25	30.88222 AU
retrograde	-452 May 22 j 21:56	14° \approx 17'34			-444 Mar 05 j 02:47	0° \overline{H}	
opposition	-452 Aug 11 j 17:50	12° \approx 52'34	0°-58'-2	retrograde	-444 Jun 10 j 11:07	2° \overline{H} 11'57	
min. Earth dist.	-452 Aug 10 j 20:07	12° \approx 54'04	28.93465 AU	opposition	-444 Aug 29 j 22:35	0° \overline{H} 46'43	-1°-28'-38
direct	-452 Oct 28 j 20:39	11° \approx 29'33		min. Earth dist.	-444 Aug 29 j 00:50	0° \overline{H} 48'14	28.87875 AU
					-444 Sep 28 j 14:34	30° \overline{R} \approx	
conjunction	-451 Feb 07 j 13:06	13° \approx 57'19	0°-56'-13	direct	-444 Nov 15 j 13:49	29° \approx 23'38	
minimum elong	-451 Feb 07 j 13:06	13° \approx 57'19	0°56'14		-444 Dec 31 j 22:02	0° \overline{H}	
max. Earth dist.	-451 Feb 08 j 10:51	13° \approx 59'22	30.92975 AU				
	-451 Mar 07 j 22:37	15° \approx		conjunction	-443 Feb 25 j 13:26	1° \overline{H} 51'52	-1°-24'-25
retrograde	-451 May 25 j 10:38	16° \approx 31'21		minimum elong	-443 Feb 25 j 13:25	1° \overline{H} 51'52	1°24'27
min. Earth dist.	-451 Aug 13 j 09:00	15° \approx 07'47	28.92629 AU	max. Earth dist.	-443 Feb 26 j 13:17	1° \overline{H} 54'07	30.87330 AU
opposition	-451 Aug 14 j 06:33	15° \approx 06'18	-1°-2'-13	retrograde	-443 Jun 12 j 23:44	4° \overline{H} 26'38	
	-451 Aug 18 j 01:44	15° \overline{R} \approx		opposition	-443 Sep 01 j 10:57	3° \overline{H} 01'20	-1°-31'-55

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Attention, astronomical year style is used: The year -443 in astronomical counting style is the year 444 BCE in historical counting style.

min. Earth dist.	-443 Aug 31 j 12:20	3° ✕ 02'55	28.86951 AU	conjunction	-434 Mar 18 j 08:34	22° ✕ 03'36	-1°-46'-23
direct	-443 Nov 18 j 02:35	1° ✕ 38'11		minimum elong	-434 Mar 18 j 08:34	22° ✕ 03'36	1°46'24
				max. Earth dist.	-434 Mar 19 j 08:54	22° ✕ 05'53	30.82214 AU
conjunction	-442 Feb 28 j 01:51	4° ✕ 06'27	-1°-27'-25	retrograde	-434 Jul 04 j 00:40	24° ✕ 38'43	
minimum elong	-442 Feb 28 j 01:51	4° ✕ 06'27	1°27'26	opposition	-434 Sep 21 j 23:34	23° ✕ 13'19	-1°-54'-42
max. Earth dist.	-442 Mar 01 j 00:46	4° ✕ 08'37	30.86389 AU	min. Earth dist.	-434 Sep 21 j 01:21	23° ✕ 14'52	28.82252 AU
retrograde	-442 Jun 15 j 12:45	6° ✕ 41'14		direct	-434 Dec 08 j 08:59	21° ✕ 49'55	
opposition	-442 Sep 03 j 23:20	5° ✕ 15'52	-1°-35'-4				
min. Earth dist.	-442 Sep 03 j 01:33	5° ✕ 17'23	28.86024 AU	conjunction	-433 Mar 20 j 22:00	24° ✕ 18'55	-1°-48'-4
direct	-442 Nov 20 j 12:39	3° ✕ 52'38		minimum elong	-433 Mar 20 j 22:00	24° ✕ 18'55	1°48'05
				max. Earth dist.	-433 Mar 21 j 20:54	24° ✕ 21'05	30.82018 AU
conjunction	-441 Mar 02 j 14:30	6° ✕ 20'56	-1°-30'-18	retrograde	-433 Jul 06 j 15:12	26° ✕ 54'04	
minimum elong	-441 Mar 02 j 14:30	6° ✕ 20'56	1°30'20	opposition	-433 Sep 24 j 11:38	25° ✕ 28'41	-1°-56'-24
max. Earth dist.	-441 Mar 03 j 14:35	6° ✕ 23'13	30.85474 AU	min. Earth dist.	-433 Sep 23 j 14:44	25° ✕ 30'09	28.82034 AU
retrograde	-441 Jun 18 j 00:47	8° ✕ 55'45		direct	-433 Dec 10 j 19:30	24° ✕ 05'16	
opposition	-441 Sep 06 j 11:31	7° ✕ 30'19	-1°-38'-4				
min. Earth dist.	-441 Sep 05 j 13:08	7° ✕ 31'53	28.85137 AU	conjunction	-432 Mar 22 j 11:40	26° ✕ 34'22	-1°-49'-34
direct	-441 Nov 23 j 00:38	6° ✕ 07'01		minimum elong	-432 Mar 22 j 11:40	26° ✕ 34'22	1°49'34
				max. Earth dist.	-432 Mar 23 j 10:58	26° ✕ 36'34	30.81753 AU
conjunction	-440 Mar 04 j 03:03	8° ✕ 35'22	-1°-33'-2	retrograde	-432 Jul 08 j 03:13	29° ✕ 09'30	
minimum elong	-440 Mar 04 j 03:03	8° ✕ 35'22	1°33'03	opposition	-432 Sep 25 j 23:26	27° ✕ 44'07	-1°-57'-55
max. Earth dist.	-440 Mar 05 j 02:12	8° ✕ 37'33	30.84628 AU	min. Earth dist.	-432 Sep 25 j 02:32	27° ✕ 45'36	28.81720 AU
retrograde	-440 Jun 19 j 13:56	11° ✕ 10'13		direct	-432 Dec 12 j 07:56	26° ✕ 20'40	
opposition	-440 Sep 07 j 23:36	9° ✕ 44'44	-1°-40'-55				
min. Earth dist.	-440 Sep 07 j 01:23	9° ✕ 46'17	28.84359 AU	conjunction	-431 Mar 25 j 01:12	28° ✕ 49'50	-1°-50'-55
direct	-440 Nov 24 j 10:51	8° ✕ 21'22		minimum elong	-431 Mar 25 j 01:12	28° ✕ 49'49	1°50'56
				max. Earth dist.	-431 Mar 25 j 22:49	28° ✕ 51'52	30.81405 AU
conjunction	-439 Mar 06 j 15:46	10° ✕ 49'47	-1°-35'-38		-431 Apr 26 j 06:02	0° ✕	
minimum elong	-439 Mar 06 j 15:46	10° ✕ 49'47	1°35'40	retrograde	-431 Jul 10 j 16:01	1° ✕ 24'57	
max. Earth dist.	-439 Mar 07 j 16:09	10° ✕ 52'05	30.83901 AU	opposition	-431 Sep 28 j 11:21	29° ✕ 59'33	-1°-59'-16
retrograde	-439 Jun 22 j 02:00	13° ✕ 24'40		min. Earth dist.	-431 Sep 27 j 15:16	0° ✕ 00'58	28.81347 AU
opposition	-439 Sep 10 j 11:42	11° ✕ 59'09	-1°-43'-37		-431 Sep 28 j 04:53	30° ✕	
min. Earth dist.	-439 Sep 09 j 13:28	12° ✕ 00'43	28.83706 AU	direct	-431 Dec 14 j 18:29	28° ✕ 36'01	
direct	-439 Nov 26 j 22:26	10° ✕ 35'46			-430 Feb 25 j 18:36	0° ✕	
conjunction	-438 Mar 09 j 04:22	13° ✕ 04'14	-1°-38'-5	conjunction	-430 Mar 27 j 14:51	1° ✕ 05'14	-1°-52'-5
minimum elong	-438 Mar 09 j 04:22	13° ✕ 04'14	1°38'06	minimum elong	-430 Mar 27 j 14:51	1° ✕ 05'14	1°52'06
max. Earth dist.	-438 Mar 10 j 04:08	13° ✕ 06'29	30.83328 AU	max. Earth dist.	-430 Mar 28 j 13:03	1° ✕ 07'20	30.81003 AU
retrograde	-438 Jun 24 j 16:36	15° ✕ 39'10		retrograde	-430 Jul 13 j 03:29	3° ✕ 40'18	
opposition	-438 Sep 12 j 23:46	14° ✕ 13'39	-1°-46'-10	opposition	-430 Sep 30 j 23:06	2° ✕ 14'53	-2°00'-26
min. Earth dist.	-438 Sep 12 j 00:54	14° ✕ 15'15	28.83212 AU	min. Earth dist.	-430 Sep 30 j 03:40	2° ✕ 16'15	28.80929 AU
direct	-438 Nov 29 j 08:47	12° ✕ 50'14		direct	-430 Dec 17 j 06:01	0° ✕ 51'17	
conjunction	-437 Mar 11 j 17:17	15° ✕ 18'49	-1°-40'-24	conjunction	-429 Mar 30 j 04:32	3° ✕ 20'32	-1°-53'-6
minimum elong	-437 Mar 11 j 17:16	15° ✕ 18'49	1°40'25	minimum elong	-429 Mar 30 j 04:32	3° ✕ 20'32	1°53'07
max. Earth dist.	-437 Mar 12 j 17:38	15° ✕ 21'06	30.82891 AU	max. Earth dist.	-429 Mar 31 j 01:21	3° ✕ 22'30	30.80597 AU
retrograde	-437 Jun 27 j 05:47	17° ✕ 53'47		retrograde	-429 Jul 15 j 17:20	5° ✕ 55'32	
opposition	-437 Sep 15 j 11:43	16° ✕ 28'17	-1°-48'-33	opposition	-429 Oct 03 j 10:37	4° ✕ 30'05	-2°-1'-25
min. Earth dist.	-437 Sep 14 j 13:35	16° ✕ 29'50	28.82847 AU	min. Earth dist.	-429 Oct 02 j 15:11	4° ✕ 31'27	28.80543 AU
direct	-437 Dec 01 j 20:43	15° ✕ 04'51		direct	-429 Dec 19 j 16:35	3° ✕ 06'23	
conjunction	-436 Mar 13 j 06:17	17° ✕ 33'32	-1°-42'-33	conjunction	-428 Mar 31 j 18:16	5° ✕ 35'43	-1°-53'-56
minimum elong	-436 Mar 13 j 06:17	17° ✕ 33'32	1°42'33	minimum elong	-428 Mar 31 j 18:16	5° ✕ 35'43	1°53'56
max. Earth dist.	-436 Mar 14 j 06:32	17° ✕ 35'49	30.82595 AU	max. Earth dist.	-428 Apr 01 j 15:19	5° ✕ 37'41	30.80230 AU
retrograde	-436 Jun 28 j 21:24	20° ✕ 08'33		retrograde	-428 Jul 17 j 04:50	8° ✕ 10'39	
opposition	-436 Sep 16 j 23:39	18° ✕ 43'05	-1°-50'-46	opposition	-428 Oct 04 j 22:13	6° ✕ 45'09	-2°-2'-13
min. Earth dist.	-436 Sep 16 j 00:40	18° ✕ 44'41	28.82602 AU	min. Earth dist.	-428 Oct 04 j 03:47	6° ✕ 46'28	28.80223 AU
direct	-436 Dec 03 j 09:24	17° ✕ 19'40		direct	-428 Dec 21 j 04:57	5° ✕ 21'24	
conjunction	-435 Mar 15 j 19:13	19° ✕ 48'28	-1°-44'-33	conjunction	-427 Apr 03 j 07:49	7° ✕ 50'46	-1°-54'-36
minimum elong	-435 Mar 15 j 19:12	19° ✕ 48'28	1°44'35	minimum elong	-427 Apr 03 j 07:49	7° ✕ 50'46	1°54'37
max. Earth dist.	-435 Mar 16 j 19:14	19° ✕ 50'43	30.82379 AU	max. Earth dist.	-427 Apr 04 j 04:24	7° ✕ 52'42	30.79973 AU
retrograde	-435 Jul 01 j 10:25	22° ✕ 23'33		retrograde	-427 Jul 19 j 18:59	10° ✕ 25'38	
opposition	-435 Sep 19 j 11:44	20° ✕ 58'06	-1°-52'-49	opposition	-427 Oct 07 j 09:39	9° ✕ 00'08	-2°-2'-50
min. Earth dist.	-435 Sep 18 j 14:02	20° ✕ 59'37	28.82422 AU	min. Earth dist.	-427 Oct 06 j 14:33	9° ✕ 01'29	28.80027 AU
direct	-435 Dec 05 j 20:24	19° ✕ 34'42		direct	-427 Dec 23 j 17:42	7° ✕ 36'18	

Attention, astronomical year style is used: The year -426 in astronomical counting style is the year 427 BCE in historical counting style.

conjunction	-426 Apr 05 j 21:36	10° Υ 05'44	-1°-55'-5		-418 Jun 19 j 07:34	0° δ	
minimum elong	-426 Apr 05 j 21:36	10° Υ 05'44	1°55'05	retrograde	-418 Aug 09 j 16:43	0° δ 42'10	
max. Earth dist.	-426 Apr 06 j 17:50	10° Υ 07'38	30.79838 AU		-418 Oct 01 j 05:01	30° κ Υ	
retrograde	-426 Jul 22 j 07:30	12° Υ 40'32		opposition	-418 Oct 27 j 15:25	29° Υ 17'06	-1°-59'-48
opposition	-426 Oct 09 j 21:06	11° Υ 15'03	-2°-3'-15	min. Earth dist.	-418 Oct 27 j 02:00	29° Υ 18'03	28.82027 AU
min. Earth dist.	-426 Oct 09 j 03:18	11° Υ 16'18	28.79974 AU	direct	-417 Jan 13 j 02:52	27° Υ 53'02	
direct	-426 Dec 26 j 04:46	9° Υ 51'10			-417 Apr 16 j 19:12	0° δ	
conjunction	-425 Apr 08 j 11:32	12° Υ 20'41	-1°-55'-23	conjunction	-417 Apr 27 j 05:30	0° δ 23'20	-1°-51'-28
minimum elong	-425 Apr 08 j 11:32	12° Υ 20'41	1°55'25	minimum elong	-417 Apr 27 j 05:30	0° δ 23'20	1°51'30
max. Earth dist.	-425 Apr 09 j 07:56	12° Υ 22'36	30.79866 AU	max. Earth dist.	-417 Apr 27 j 19:17	0° δ 24'38	30.81952 AU
retrograde	-425 Jul 24 j 21:56	14° Υ 55'25		retrograde	-417 Aug 12 j 04:37	2° δ 57'30	
opposition	-425 Oct 12 j 08:25	13° Υ 29'57	-2°-3'-29	opposition	-417 Oct 30 j 02:37	1° δ 32'28	-1°-58'-32
min. Earth dist.	-425 Oct 11 j 13:57	13° Υ 31'15	28.80070 AU	min. Earth dist.	-417 Oct 29 j 15:03	1° δ 33'17	28.82122 AU
direct	-425 Dec 28 j 18:03	12° Υ 06'03		direct	-416 Jan 15 j 14:08	0° δ 08'20	
conjunction	-424 Apr 10 j 01:20	14° Υ 35'39	-1°-55'-31	conjunction	-416 Apr 28 j 19:51	2° δ 38'41	-1°-50'-12
minimum elong	-424 Apr 10 j 01:20	14° Υ 35'39	1°55'32	minimum elong	-416 Apr 28 j 19:51	2° δ 38'41	1°50'13
max. Earth dist.	-424 Apr 10 j 20:34	14° Υ 37'27	30.80031 AU	max. Earth dist.	-416 Apr 29 j 09:13	2° δ 39'56	30.82058 AU
retrograde	-424 Jul 26 j 11:56	17° Υ 10'20		retrograde	-416 Aug 13 j 18:29	5° δ 12'43	
opposition	-424 Oct 13 j 19:49	15° Υ 44'55	-2°-3'-32	opposition	-416 Oct 31 j 13:32	3° δ 47'41	-1°-57'-6
min. Earth dist.	-424 Oct 13 j 02:29	15° Υ 46'09	28.80309 AU	min. Earth dist.	-416 Oct 31 j 01:43	3° δ 48'31	28.82234 AU
direct	-424 Dec 30 j 05:08	14° Υ 21'00		direct	-415 Jan 17 j 04:15	2° δ 23'29	
conjunction	-423 Apr 12 j 15:23	16° Υ 50'43	-1°-55'-28	conjunction	-415 May 01 j 10:08	4° δ 53'54	-1°-48'-46
minimum elong	-423 Apr 12 j 15:24	16° Υ 50'43	1°55'30	minimum elong	-415 May 01 j 10:09	4° δ 53'54	1°48'48
max. Earth dist.	-423 Apr 13 j 11:13	16° Υ 52'35	30.80334 AU	max. Earth dist.	-415 May 01 j 22:06	4° δ 55'01	30.82200 AU
retrograde	-423 Jul 29 j 00:25	19° Υ 25'21		retrograde	-415 Aug 16 j 07:39	7° δ 27'48	
opposition	-423 Oct 16 j 07:04	18° Υ 00'01	-2°-3'-23	opposition	-415 Nov 03 j 00:29	6° δ 02'47	-1°-55'-29
min. Earth dist.	-423 Oct 15 j 13:38	18° Υ 01'15	28.80650 AU	min. Earth dist.	-415 Nov 02 j 14:05	6° δ 03'31	28.82423 AU
direct	-422 Jan 01 j 17:40	16° Υ 36'06		direct	-414 Jan 19 j 16:17	4° δ 38'30	
conjunction	-422 Apr 15 j 05:24	19° Υ 05'55	-1°-55'-15	conjunction	-414 May 04 j 00:34	7° δ 09'00	-1°-47'-11
minimum elong	-422 Apr 15 j 05:24	19° Υ 05'55	1°55'15	minimum elong	-414 May 04 j 00:34	7° δ 09'00	1°47'11
max. Earth dist.	-422 Apr 15 j 23:33	19° Υ 07'37	30.80713 AU	max. Earth dist.	-414 May 04 j 12:44	7° δ 10'08	30.82440 AU
retrograde	-422 Jul 31 j 14:05	21° Υ 40'31		retrograde	-414 Aug 18 j 19:51	9° δ 42'45	
opposition	-422 Oct 18 j 18:26	20° Υ 15'15	-2°-3'-3	opposition	-414 Nov 05 j 11:19	8° δ 17'46	-1°-53'-41
min. Earth dist.	-422 Oct 18 j 01:59	20° Υ 16'25	28.81046 AU	min. Earth dist.	-414 Nov 05 j 00:53	8° δ 18'30	28.82706 AU
direct	-421 Jan 04 j 04:05	18° Υ 51'21		direct	-413 Jan 22 j 05:33	6° δ 53'26	
conjunction	-421 Apr 17 j 19:50	21° Υ 21'17	-1°-54'-50	conjunction	-413 May 06 j 14:51	9° δ 23'59	-1°-45'-25
minimum elong	-421 Apr 17 j 19:50	21° Υ 21'17	1°54'51	minimum elong	-413 May 06 j 14:51	9° δ 23'59	1°45'26
max. Earth dist.	-421 Apr 18 j 14:16	21° Υ 23'01	30.81097 AU	max. Earth dist.	-413 May 07 j 01:16	9° δ 24'58	30.82790 AU
retrograde	-421 Aug 03 j 02:10	23° Υ 55'50		retrograde	-413 Aug 21 j 09:32	11° δ 57'36	
opposition	-421 Oct 21 j 05:39	22° Υ 30'39	-2°-2'-31	opposition	-413 Nov 07 j 22:05	10° δ 32'40	-1°-51'-43
min. Earth dist.	-421 Oct 20 j 14:13	22° Υ 31'44	28.81405 AU	min. Earth dist.	-413 Nov 07 j 12:29	10° δ 33'21	28.83127 AU
direct	-420 Jan 06 j 15:25	21° Υ 06'44		direct	-412 Jan 24 j 16:45	9° δ 08'18	
conjunction	-420 Apr 19 j 10:10	23° Υ 36'47	-1°-54'-15	conjunction	-412 May 08 j 05:16	11° δ 38'56	-1°-43'-30
minimum elong	-420 Apr 19 j 10:10	23° Υ 36'47	1°54'15	minimum elong	-412 May 08 j 05:16	11° δ 38'56	1°43'30
max. Earth dist.	-420 Apr 20 j 02:38	23° Υ 38'19	30.81434 AU	max. Earth dist.	-412 May 08 j 16:14	11° δ 39'57	30.83280 AU
retrograde	-420 Aug 04 j 15:52	26° Υ 11'16		retrograde	-412 Aug 22 j 21:23	14° δ 12'24	
opposition	-420 Oct 22 j 17:00	24° Υ 46'08	-2°-1'-48	opposition	-412 Nov 09 j 08:56	12° δ 47'32	-1°-49'-34
min. Earth dist.	-420 Oct 22 j 01:59	24° Υ 47'12	28.81702 AU	min. Earth dist.	-412 Nov 08 j 23:56	12° δ 48'10	28.83676 AU
direct	-419 Jan 08 j 02:03	23° Υ 22'11		direct	-411 Jan 26 j 04:41	11° δ 23'08	
conjunction	-419 Apr 22 j 00:30	25° Υ 52'20	-1°-53'-30	conjunction	-411 May 10 j 19:25	13° δ 53'50	-1°-41'-25
minimum elong	-419 Apr 22 j 00:31	25° Υ 52'20	1°53'31	minimum elong	-411 May 10 j 19:25	13° δ 53'50	1°41'26
max. Earth dist.	-419 Apr 22 j 16:40	25° Υ 53'51	30.81678 AU	max. Earth dist.	-411 May 11 j 04:45	13° δ 54'43	30.83910 AU
retrograde	-419 Aug 07 j 02:57	28° Υ 26'44			-411 Jun 10 j 06:50	15° δ	
opposition	-419 Oct 25 j 04:23	27° Υ 01'39	-2°00'-53	retrograde	-411 Aug 25 j 09:59	16° δ 27'12	
min. Earth dist.	-419 Oct 24 j 14:56	27° Υ 02'36	28.81897 AU	opposition	-411 Nov 11 j 19:41	15° δ 02'25	-1°-47'-15
direct	-418 Jan 10 j 14:18	25° Υ 37'39		min. Earth dist.	-411 Nov 11 j 10:53	15° δ 03'03	28.84359 AU
conjunction	-418 Apr 24 j 15:00	28° Υ 07'53	-1°-52'-34	direct	-411 Nov 13 j 05:42	15° κ δ	
minimum elong	-418 Apr 24 j 15:00	28° Υ 07'53	1°52'35		-410 Jan 28 j 15:43	13° δ 38'00	
max. Earth dist.	-418 Apr 25 j 05:42	28° Υ 09'15	30.81848 AU		-410 Apr 11 j 13:26	15° δ	

Planetary Phenomena of Neptune from -900 through -400 (UT), Astrodienst AG 7-Dez-2017 14:47, page 32

Attention, astronomical year style is used: The year -410 in astronomical counting style is the year 411 BCE in historical counting style.

conjunction	-410 May 13 j 09:57	16°8'08"48	-1°-39'-10	conjunction	-402 Jun 01 j 05:42	4°II'06"59	-1°-16'-13
minimum elong	-410 May 13 j 09:57	16°8'08"48	1°39'11	minimum elong	-402 Jun 01 j 05:42	4°II'06"59	1°16'13
max. Earth dist.	-410 May 13 j 19:17	16°8'09"40	30.84633 AU	max. Earth dist.	-402 Jun 01 j 05:29	4°II'06"58	30.89295 AU
retrograde	-410 Aug 27 j 20:20	18°8'42"02		retrograde	-402 Sep 14 j 22:35	6°II'38"52	
opposition	-410 Nov 14 j 06:23	17°8'17"21	-1°-44'-47	opposition	-402 Dec 01 j 19:09	5°II'14"37	-1°-19'-40
min. Earth dist.	-410 Nov 13 j 23:07	17°8'17"52	28.85104 AU	min. Earth dist.	-402 Dec 01 j 18:46	5°II'14"38	28.89634 AU
direct	-409 Jan 31 j 03:01	15°8'52"56		direct	-401 Feb 18 j 06:00	3°II'49"44	
conjunction	-409 May 16 j 00:30	18°8'23"49	-1°-36'-47	conjunction	-401 Jun 03 j 20:00	6°II'21"04	-1°-12'-48
minimum elong	-409 May 16 j 00:30	18°8'23"49	1°36'48	minimum elong	-401 Jun 03 j 20:00	6°II'21"04	1°12'48
max. Earth dist.	-409 May 16 j 08:15	18°8'24"33	30.85405 AU	max. Earth dist.	-401 Jun 03 j 19:57	6°II'21"04	30.89897 AU
retrograde	-409 Aug 30 j 10:02	20°8'56"56		retrograde	-401 Sep 17 j 08:33	8°II'52"46	
opposition	-409 Nov 16 j 17:05	19°8'32"21	-1°-42'-8	opposition	-401 Dec 04 j 05:38	7°II'28"34	-1°-15'-57
min. Earth dist.	-409 Nov 16 j 09:53	19°8'32"51	28.85863 AU	min. Earth dist.	-401 Dec 04 j 06:31	7°II'28"31	28.90295 AU
direct	-408 Feb 02 j 14:28	18°8'07"54		direct	-400 Feb 20 j 17:28	6°II'03"39	
conjunction	-408 May 17 j 14:58	20°8'38"53	-1°-34'-14	conjunction	-400 Jun 05 j 09:55	8°II'35"02	-1°-9'-16
minimum elong	-408 May 17 j 14:58	20°8'38"53	1°34'15	minimum elong	-400 Jun 05 j 09:55	8°II'35"02	1°09'17
max. Earth dist.	-408 May 17 j 21:50	20°8'39"31	30.86136 AU	max. Earth dist.	-400 Jun 05 j 08:31	8°II'34"54	30.90639 AU
retrograde	-408 Aug 31 j 20:45	23°8'11"52		retrograde	-400 Sep 18 j 21:19	11°II'06"35	
opposition	-408 Nov 18 j 03:56	21°8'47"21	-1°-39'-21	opposition	-400 Dec 05 j 15:57	9°II'42"27	-1°-12'-8
min. Earth dist.	-408 Nov 17 j 22:46	21°8'47"43	28.86565 AU	min. Earth dist.	-400 Dec 05 j 16:24	9°II'42"26	28.91105 AU
direct	-407 Feb 04 j 01:21	20°8'22"52					
conjunction	-407 May 20 j 05:35	22°8'53"55	-1°-31'-33				
minimum elong	-407 May 20 j 05:36	22°8'53"56	1°31'34				
max. Earth dist.	-407 May 20 j 11:26	22°8'54"28	30.86808 AU				
retrograde	-407 Sep 03 j 09:35	25°8'26"45					
opposition	-407 Nov 20 j 14:33	24°8'02"18	-1°-36'-24				
min. Earth dist.	-407 Nov 20 j 09:32	24°8'02"39	28.87180 AU				
direct	-406 Feb 06 j 15:26	22°8'37"46					
conjunction	-406 May 22 j 20:10	25°8'08"53	-1°-28'-44				
minimum elong	-406 May 22 j 20:10	25°8'08"53	1°28'45				
max. Earth dist.	-406 May 23 j 00:09	25°8'09"15	30.87378 AU				
retrograde	-406 Sep 05 j 21:48	27°8'41"33					
opposition	-406 Nov 23 j 01:19	26°8'17"08	-1°-33'-19				
min. Earth dist.	-406 Nov 22 j 22:10	26°8'17"21	28.87707 AU				
direct	-405 Feb 09 j 03:29	24°8'52"31					
conjunction	-405 May 25 j 10:47	27°8'23"42	-1°-25'-47				
minimum elong	-405 May 25 j 10:47	27°8'23"42	1°25'48				
max. Earth dist.	-405 May 25 j 14:21	27°8'24"02	30.87873 AU				
retrograde	-405 Sep 08 j 09:56	29°8'56"09					
opposition	-405 Nov 25 j 11:50	28°8'31"47	-1°-30'-6				
min. Earth dist.	-405 Nov 25 j 09:06	28°8'31"59	28.88161 AU				
direct	-404 Feb 11 j 17:07	27°8'07"07					
conjunction	-404 May 27 j 01:08	29°8'38"19	-1°-22'-43				
minimum elong	-404 May 27 j 01:08	29°8'38"19	1°22'43				
max. Earth dist.	-404 May 27 j 02:35	29°8'38"27	30.88323 AU				
retrograde	-404 Jun 05 j 18:33	0°II'					
opposition	-404 Sep 09 j 23:17	2°II'10"36					
min. Earth dist.	-404 Nov 26 j 22:23	0°II'46"15	-1°-26'-45				
direct	-404 Nov 26 j 20:46	0°II'46"22	28.88612 AU				
	-404 Dec 25 j 15:00	30°8'					
conjunction	-403 May 29 j 15:27	1°II'52"45	-1°-19'-31				
minimum elong	-403 May 29 j 15:28	1°II'52"45	1°19'32				
max. Earth dist.	-403 May 29 j 17:10	1°II'52"55	30.88783 AU				
retrograde	-403 Sep 12 j 10:26	4°II'24"50					
opposition	-403 Nov 29 j 08:52	3°II'00"31	-1°-23'-16				
min. Earth dist.	-403 Nov 29 j 08:12	3°II'00"34	28.89080 AU				
direct	-402 Feb 15 j 18:15	1°II'35"42					

Planetary Phenomena of Neptune from -400 through 100 (UT), Astrodienst AG 7-Dez-2017 14:48, page 1

Attention, astronomical year style is used: The year -400 in astronomical counting style is the year 401 BCE in historical counting style.

direct	-400 Feb 20 j 17:28	6°II03'39		conjunction	-392 Jun 24 j 02:13	26°II27'10	0°-37'-46
				minimum elong	-392 Jun 24 j 02:13	26°II27'10	0°37'47
conjunction	-400 Jun 05 j 09:55	8°II35'02	-1°-9'-16	max. Earth dist.	-392 Jun 23 j 17:40	26°II26'23	30.98498 AU
minimum elong	-400 Jun 05 j 09:55	8°II35'02	1°09'17	retrograde	-392 Oct 06 j 17:29	28°II57'26	
max. Earth dist.	-400 Jun 05 j 08:31	8°II34'54	30.90639 AU	opposition	-392 Dec 23 j 02:51	27°II34'02	0°-38'-7
retrograde	-400 Sep 18 j 21:19	11°II06'35		min. Earth dist.	-392 Dec 23 j 11:21	27°II33'26	28.98899 AU
opposition	-400 Dec 05 j 15:57	9°II42'27	-1°-12'-8	direct	-391 Mar 12 j 06:55	26°II08'56	
min. Earth dist.	-400 Dec 05 j 16:24	9°II42'26	28.91105 AU				
direct	-399 Feb 22 j 04:35	8°II17'30		conjunction	-391 Jun 26 j 15:56	28°II40'48	0°-33'-32
				minimum elong	-391 Jun 26 j 15:57	28°II40'48	0°33'32
conjunction	-399 Jun 08 j 00:01	10°II48'57	-1°-5'-38	max. Earth dist.	-391 Jun 26 j 05:37	28°II39'51	30.99270 AU
minimum elong	-399 Jun 08 j 00:02	10°II48'57	1°05'39		-391 Aug 02 j 23:17	0°☾	
max. Earth dist.	-399 Jun 07 j 22:18	10°II48'47	30.91521 AU	retrograde	-391 Oct 09 j 05:39	1°☾10'52	
retrograde	-399 Sep 21 j 06:55	13°II20'21			-391 Dec 18 j 03:15	30°RII	
opposition	-399 Dec 08 j 02:17	11°II56'20	-1°-8'-11	opposition	-391 Dec 25 j 12:55	29°II47'30	0°-33'-34
min. Earth dist.	-399 Dec 08 j 04:22	11°II56'11	28.92058 AU	min. Earth dist.	-391 Dec 25 j 21:20	29°II46'54	28.99662 AU
direct	-398 Feb 24 j 14:56	10°II31'22		direct	-390 Mar 14 j 18:56	28°II22'19	
					-390 Jun 04 j 09:16	0°☾	
conjunction	-398 Jun 10 j 14:08	13°II02'54	-1°-1'-54	conjunction	-390 Jun 29 j 05:42	0°☾54'11	0°-29'-15
minimum elong	-398 Jun 10 j 14:08	13°II02'54	1°01'55	minimum elong	-390 Jun 29 j 05:42	0°☾54'11	0°29'16
max. Earth dist.	-398 Jun 10 j 11:43	13°II02'40	30.92548 AU	max. Earth dist.	-390 Jun 28 j 18:56	0°☾53'12	31.00034 AU
retrograde	-398 Sep 23 j 18:49	15°II34'10		retrograde	-390 Oct 11 j 14:12	3°☾24'03	
opposition	-398 Dec 10 j 12:32	14°II10'16	-1°-4'-9	opposition	-390 Dec 27 j 23:16	2°☾00'43	0°-28'-58
min. Earth dist.	-398 Dec 10 j 14:26	14°II10'07	28.93118 AU	min. Earth dist.	-390 Dec 28 j 09:25	2°☾00'00	29.00447 AU
direct	-397 Feb 27 j 04:14	12°II45'18		direct	-389 Mar 17 j 06:05	0°☾35'29	
conjunction	-397 Jun 13 j 04:09	15°II16'55	0°-58'-4	conjunction	-389 Jul 01 j 19:09	3°☾07'20	0°-24'-56
minimum elong	-397 Jun 13 j 04:09	15°II16'55	0°58'04	minimum elong	-389 Jul 01 j 19:09	3°☾07'20	0°24'56
max. Earth dist.	-397 Jun 13 j 00:29	15°II16'35	30.93640 AU	max. Earth dist.	-389 Jul 01 j 07:41	3°☾06'17	31.00853 AU
retrograde	-397 Sep 26 j 06:22	17°II48'04		retrograde	-389 Oct 14 j 00:41	5°☾37'00	
opposition	-397 Dec 12 j 22:55	16°II24'16	-1°00'00	opposition	-389 Dec 30 j 09:26	4°☾13'43	0°-24'-20
min. Earth dist.	-397 Dec 13 j 02:25	16°II24'01	28.94233 AU	min. Earth dist.	-389 Dec 30 j 19:13	4°☾13'01	29.01301 AU
direct	-396 Feb 29 j 15:09	14°II59'19		direct	-388 Mar 18 j 18:57	2°☾48'26	
conjunction	-396 Jun 14 j 18:16	17°II31'02	0°-54'-9	conjunction	-388 Jul 03 j 08:31	5°☾20'17	0°-20'-34
minimum elong	-396 Jun 14 j 18:16	17°II31'02	0°54'10	minimum elong	-388 Jul 03 j 08:31	5°☾20'17	0°20'35
max. Earth dist.	-396 Jun 14 j 14:17	17°II30'40	30.94760 AU	max. Earth dist.	-388 Jul 02 j 20:12	5°☾19'09	31.01758 AU
retrograde	-396 Sep 27 j 18:23	20°II02'01		retrograde	-388 Oct 15 j 11:01	7°☾49'46	
opposition	-396 Dec 14 j 09:13	18°II38'21	0°-55'-46	opposition	-388 Dec 31 j 19:40	6°☾26'32	0°-19'-39
min. Earth dist.	-396 Dec 14 j 13:09	18°II38'04	28.95327 AU	min. Earth dist.	-387 Jan 01 j 06:39	6°☾25'46	29.02279 AU
direct	-395 Mar 03 j 04:03	17°II13'24		direct	-387 Mar 21 j 05:06	5°☾01'13	
conjunction	-395 Jun 17 j 08:12	19°II45'11	0°-50'-9	conjunction	-387 Jul 05 j 21:51	7°☾33'05	0°-16'-12
minimum elong	-395 Jun 17 j 08:12	19°II45'11	0°50'09	minimum elong	-387 Jul 05 j 21:51	7°☾33'05	0°16'12
max. Earth dist.	-395 Jun 17 j 02:04	19°II44'37	30.95827 AU	max. Earth dist.	-387 Jul 05 j 09:38	7°☾31'57	31.02802 AU
retrograde	-395 Sep 30 j 07:53	22°II16'01		retrograde	-387 Oct 17 j 21:38	10°☾02'24	
opposition	-395 Dec 16 j 19:40	20°II52'26	0°-51'-28	opposition	-386 Jan 03 j 05:55	8°☾39'15	0°-14'-57
min. Earth dist.	-395 Dec 17 j 00:49	20°II52'04	28.96357 AU	min. Earth dist.	-386 Jan 03 j 16:50	8°☾38'29	29.03374 AU
direct	-394 Mar 05 j 16:37	19°II27'28		direct	-386 Mar 23 j 18:15	7°☾13'55	
conjunction	-394 Jun 19 j 22:26	21°II59'18	0°-46'-5	conjunction	-386 Jul 08 j 11:06	9°☾45'49	0°-11'-48
minimum elong	-394 Jun 19 j 22:26	21°II59'18	0°46'06	minimum elong	-386 Jul 08 j 11:06	9°☾45'49	0°11'49
max. Earth dist.	-394 Jun 19 j 16:10	21°II58'43	30.96807 AU	behind sun begin	-386 Jul 08 j 06:35	9°☾45'25	
retrograde	-394 Oct 02 j 18:46	24°II29'58		behind sun end	-386 Jul 08 j 15:38	9°☾46'13	
opposition	-394 Dec 19 j 06:02	23°II06'27	0°-47'-5	max. Earth dist.	-386 Jul 07 j 21:21	9°☾44'33	31.03961 AU
min. Earth dist.	-394 Dec 19 j 12:28	23°II06'00	28.97278 AU	retrograde	-386 Oct 20 j 09:53	12°☾14'59	
direct	-393 Mar 08 j 06:20	21°II41'28		opposition	-385 Jan 05 j 16:07	10°☾51'56	0°-10'-14
				min. Earth dist.	-385 Jan 06 j 03:42	10°☾51'07	29.04592 AU
conjunction	-393 Jun 22 j 12:23	24°II13'19	0°-41'-57	direct	-385 Mar 26 j 06:00	9°☾26'38	
minimum elong	-393 Jun 22 j 12:23	24°II13'19	0°41'58	max. Earth dist.	-385 Jul 10 j 11:11	11°☾57'22	31.05220 AU
max. Earth dist.	-393 Jun 22 j 03:51	24°II12'32	30.97692 AU				
retrograde	-393 Oct 05 j 07:11	26°II43'48		conjunction	-385 Jul 11 j 00:26	11°☾58'35	0°-7'-23
opposition	-393 Dec 21 j 16:25	25°II20'20	0°-42'-38	minimum elong	-385 Jul 11 j 00:26	11°☾58'35	0°07'23
min. Earth dist.	-393 Dec 21 j 23:18	25°II19'51	28.98123 AU	behind sun begin	-385 Jul 10 j 18:26	11°☾58'03	
direct	-392 Mar 09 j 18:32	23°II55'18					

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Attention, astronomical year style is used: The year -385 in astronomical counting style is the year 386 BCE in historical counting style.

behind sun end	-385 Jul 11 j 06:26	11° \mathring{S} 59'07		max. Earth dist.	-378 Jul 25 j 23:58	27° \mathring{S} 26'29	31.12418 AU
retrograde	-385 Oct 22 j 20:23	14° \mathring{S} 27'37		retrograde	-378 Nov 06 j 22:38	29° \mathring{S} 56'21	
opposition	-384 Jan 08 j 02:30	13° \mathring{S} 04'41	0°-5'-30	opposition	-377 Jan 23 j 03:23	28° \mathring{S} 33'54	0°27'25
min. Earth dist.	-384 Jan 08 j 14:57	13° \mathring{S} 03'48	29.05869 AU	min. Earth dist.	-377 Jan 23 j 21:00	28° \mathring{S} 32'40	29.12795 AU
direct	-384 Mar 27 j 19:02	11° \mathring{S} 39'25		direct	-377 Apr 13 j 06:43	27° \mathring{S} 08'35	
				max. Earth dist.	-377 Jul 28 j 11:01	29° \mathring{S} 38'40	31.13135 AU
conjunction	-384 Jul 12 j 13:24	14° \mathring{S} 11'24	0°-2'-57				
minimum elong	-384 Jul 12 j 13:24	14° \mathring{S} 11'24	0°02'58	conjunction	-377 Jul 29 j 07:49	29° \mathring{S} 40'36	0°27'51
behind sun begin	-384 Jul 12 j 06:50	14° \mathring{S} 10'50		minimum elong	-377 Jul 29 j 07:49	29° \mathring{S} 40'36	0°27'52
behind sun end	-384 Jul 12 j 19:57	14° \mathring{S} 11'59			-377 Aug 07 j 01:11	0° \mathring{S}	
max. Earth dist.	-384 Jul 11 j 22:24	14° \mathring{S} 10'02	31.06511 AU	retrograde	-377 Nov 09 j 09:55	2° \mathring{S} 08'31	
retrograde	-384 Oct 24 j 09:02	16° \mathring{S} 40'20		opposition	-376 Jan 25 j 13:50	0° \mathring{S} 46'06	0°31'59
opposition	-383 Jan 09 j 12:47	15° \mathring{S} 17'30	0°00'-45	min. Earth dist.	-376 Jan 26 j 07:55	0° \mathring{S} 44'50	29.13536 AU
min. Earth dist.	-383 Jan 10 j 01:28	15° \mathring{S} 16'37	29.07155 AU		-376 Feb 23 j 15:05	30° \mathring{R} \mathring{S}	
asc. node	-383 Mar 09 j 15:51	13° \mathring{S} 59'09		direct	-376 Apr 14 j 18:21	29° \mathring{S} 20'44	
direct	-383 Mar 30 j 06:49	13° \mathring{S} 52'16			-376 Jun 03 j 21:10	0° \mathring{S}	
max. Earth dist.	-383 Jul 14 j 11:50	16° \mathring{S} 22'57	31.07759 AU				
				conjunction	-376 Jul 30 j 20:07	1° \mathring{S} 52'43	0°32'06
conjunction	-383 Jul 15 j 02:43	16° \mathring{S} 24'19	0°01'36	minimum elong	-376 Jul 30 j 20:06	1° \mathring{S} 52'43	0°32'06
minimum elong	-383 Jul 15 j 02:41	16° \mathring{S} 24'19	0°01'36	max. Earth dist.	-376 Jul 30 j 00:06	1° \mathring{S} 50'52	31.13891 AU
behind sun begin	-383 Jul 14 j 20:06	16° \mathring{S} 23'44		retrograde	-376 Nov 10 j 19:15	4° \mathring{S} 20'30	
behind sun end	-383 Jul 15 j 09:16	16° \mathring{S} 24'54		opposition	-375 Jan 27 j 00:19	2° \mathring{S} 58'05	0°36'30
retrograde	-383 Oct 26 j 19:41	18° \mathring{S} 53'07		min. Earth dist.	-375 Jan 27 j 19:01	2° \mathring{S} 56'47	29.14324 AU
opposition	-382 Jan 11 j 23:10	17° \mathring{S} 30'23	0°03'59	direct	-375 Apr 17 j 07:13	1° \mathring{S} 32'42	
min. Earth dist.	-382 Jan 12 j 13:32	17° \mathring{S} 29'23	29.08363 AU	max. Earth dist.	-375 Aug 01 j 10:57	4° \mathring{S} 02'40	31.14724 AU
direct	-382 Apr 01 j 19:15	16° \mathring{S} 05'11					
				conjunction	-375 Aug 02 j 08:18	4° \mathring{S} 04'39	0°36'19
conjunction	-382 Jul 17 j 15:50	18° \mathring{S} 37'16	0°06'03	minimum elong	-375 Aug 02 j 08:18	4° \mathring{S} 04'39	0°36'19
minimum elong	-382 Jul 17 j 15:50	18° \mathring{S} 37'16	0°06'02	retrograde	-375 Nov 13 j 07:15	6° \mathring{S} 32'18	
behind sun begin	-382 Jul 17 j 09:35	18° \mathring{S} 36'42		opposition	-374 Jan 29 j 10:37	5° \mathring{S} 09'56	0°40'58
behind sun end	-382 Jul 17 j 22:04	18° \mathring{S} 37'49		min. Earth dist.	-374 Jan 30 j 04:56	5° \mathring{S} 08'39	29.15217 AU
max. Earth dist.	-382 Jul 16 j 23:06	18° \mathring{S} 35'43	31.08919 AU	direct	-374 Apr 19 j 19:12	3° \mathring{S} 44'32	
retrograde	-382 Oct 29 j 08:05	21° \mathring{S} 05'56					
opposition	-381 Jan 14 j 09:36	19° \mathring{S} 43'18	0°08'43	conjunction	-374 Aug 04 j 20:35	6° \mathring{S} 16'28	0°40'28
min. Earth dist.	-381 Jan 14 j 23:51	19° \mathring{S} 42'18	29.09464 AU	minimum elong	-374 Aug 04 j 20:35	6° \mathring{S} 16'28	0°40'27
direct	-381 Apr 04 j 07:35	18° \mathring{S} 18'05		max. Earth dist.	-374 Aug 04 j 00:05	6° \mathring{S} 14'34	31.15663 AU
max. Earth dist.	-381 Jul 19 j 11:39	20° \mathring{S} 48'36	31.09946 AU	retrograde	-374 Nov 15 j 17:42	8° \mathring{S} 44'00	
				opposition	-373 Jan 31 j 21:14	7° \mathring{S} 21'41	0°45'23
conjunction	-381 Jul 20 j 04:51	20° \mathring{S} 50'11	0°10'27	min. Earth dist.	-373 Feb 01 j 16:32	7° \mathring{S} 20'20	29.16211 AU
minimum elong	-381 Jul 20 j 04:51	20° \mathring{S} 50'11	0°10'27	direct	-373 Apr 22 j 08:29	5° \mathring{S} 56'19	
behind sun begin	-381 Jul 19 j 23:44	20° \mathring{S} 49'44		max. Earth dist.	-373 Aug 06 j 10:58	8° \mathring{S} 26'14	31.16709 AU
behind sun end	-381 Jul 20 j 09:57	20° \mathring{S} 50'38					
retrograde	-381 Oct 31 j 16:50	23° \mathring{S} 18'43		conjunction	-373 Aug 07 j 08:27	8° \mathring{S} 28'14	0°44'33
opposition	-380 Jan 16 j 20:10	21° \mathring{S} 56'09	0°13'26	minimum elong	-373 Aug 07 j 08:27	8° \mathring{S} 28'14	0°44'34
min. Earth dist.	-380 Jan 17 j 12:16	21° \mathring{S} 55'02	29.10438 AU	retrograde	-373 Nov 18 j 05:23	10° \mathring{S} 55'40	
direct	-380 Apr 05 j 18:47	20° \mathring{S} 30'56		opposition	-372 Feb 03 j 07:41	9° \mathring{S} 33'25	0°49'43
				min. Earth dist.	-372 Feb 04 j 02:12	9° \mathring{S} 32'08	29.17291 AU
conjunction	-380 Jul 21 j 17:46	23° \mathring{S} 03'02	0°14'50	direct	-372 Apr 23 j 21:15	8° \mathring{S} 08'05	
minimum elong	-380 Jul 21 j 17:46	23° \mathring{S} 03'02	0°14'50				
behind sun begin	-380 Jul 21 j 15:24	23° \mathring{S} 02'49		conjunction	-372 Aug 08 j 20:30	10° \mathring{S} 40'00	0°48'35
behind sun end	-380 Jul 21 j 20:08	23° \mathring{S} 03'14		minimum elong	-372 Aug 08 j 20:30	10° \mathring{S} 40'00	0°48'35
max. Earth dist.	-380 Jul 20 j 23:33	23° \mathring{S} 01'21	31.10866 AU	max. Earth dist.	-372 Aug 07 j 23:13	10° \mathring{S} 38'02	31.17801 AU
retrograde	-380 Nov 02 j 03:11	25° \mathring{S} 31'24		retrograde	-372 Nov 19 j 14:28	13° \mathring{S} 07'21	
opposition	-379 Jan 18 j 06:30	24° \mathring{S} 08'54	0°18'08	opposition	-371 Feb 04 j 18:13	11° \mathring{S} 45'11	0°53'59
min. Earth dist.	-379 Jan 18 j 22:32	24° \mathring{S} 07'47	29.11299 AU	min. Earth dist.	-371 Feb 05 j 14:12	11° \mathring{S} 43'48	29.18399 AU
direct	-379 Apr 08 j 07:19	22° \mathring{S} 43'39		direct	-371 Apr 26 j 08:11	10° \mathring{S} 19'53	
max. Earth dist.	-379 Jul 23 j 11:19	25° \mathring{S} 13'57	31.11674 AU	max. Earth dist.	-371 Aug 10 j 10:37	12° \mathring{S} 49'46	31.18896 AU
conjunction	-379 Jul 24 j 06:36	25° \mathring{S} 15'44	0°19'13	conjunction	-371 Aug 11 j 08:29	12° \mathring{S} 51'48	0°52'32
minimum elong	-379 Jul 24 j 06:36	25° \mathring{S} 15'44	0°19'14	minimum elong	-371 Aug 11 j 08:28	12° \mathring{S} 51'48	0°52'33
retrograde	-379 Nov 04 j 13:10	27° \mathring{S} 43'58			-371 Oct 19 j 13:41	15° \mathring{S}	
opposition	-378 Jan 20 j 16:59	26° \mathring{S} 21'30	0°22'47	retrograde	-371 Nov 22 j 01:07	15° \mathring{S} 19'03	
min. Earth dist.	-378 Jan 21 j 10:28	26° \mathring{S} 20'17	29.12076 AU		-371 Dec 26 j 02:08	15° \mathring{R} \mathring{S}	
direct	-378 Apr 10 j 17:07	24° \mathring{S} 56'13		opposition	-370 Feb 07 j 04:49	13° \mathring{S} 56'58	0°58'10
				min. Earth dist.	-370 Feb 08 j 00:28	13° \mathring{S} 55'36	29.19459 AU
conjunction	-378 Jul 26 j 19:20	27° \mathring{S} 28'16	0°23'33	direct	-370 Apr 28 j 20:45	12° \mathring{S} 31'42	
minimum elong	-378 Jul 26 j 19:20	27° \mathring{S} 28'16	0°23'33		-370 Aug 12 j 05:45	15° \mathring{S}	

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Attention, astronomical year style is used: The year -370 in astronomical counting style is the year 371 BCE in historical counting style.

conjunction	-370 Aug 13 j 20:24	15°♏03'35	0°56'25	direct	-362 May 16 j 20:49	0°♐02'26	
minimum elong	-370 Aug 13 j 20:23	15°♏03'35	0°56'25				
max. Earth dist.	-370 Aug 12 j 21:48	15°♏01'30	31.19904 AU	conjunction	-362 Aug 31 j 15:25	2°♐33'53	1°23'56
retrograde	-370 Nov 24 j 11:05	17°♏30'46		minimum elong	-362 Aug 31 j 15:25	2°♐33'53	1°23'55
opposition	-369 Feb 09 j 15:37	16°♏08'44	1°02'16	max. Earth dist.	-362 Aug 30 j 15:29	2°♐31'40	31.24943 AU
min. Earth dist.	-369 Feb 10 j 12:26	16°♏07'17	29.20433 AU	retrograde	-362 Dec 11 j 19:46	5°♐00'24	
	-369 Mar 29 j 17:41	15°♐♏		opposition	-361 Feb 27 j 06:14	3°♐38'28	1°31'12
direct	-369 May 01 j 06:38	14°♏43'29		min. Earth dist.	-361 Feb 28 j 03:54	3°♐36'58	29.25388 AU
	-369 Jun 02 j 10:27	15°♏		direct	-361 May 19 j 09:41	2°♐13'14	
max. Earth dist.	-369 Aug 15 j 09:47	17°♏13'15	31.20815 AU	max. Earth dist.	-361 Sep 02 j 02:21	4°♐42'25	31.25676 AU
conjunction	-369 Aug 16 j 08:18	17°♏15'21	1°00'12	conjunction	-361 Sep 03 j 02:15	4°♐44'39	1°26'52
minimum elong	-369 Aug 16 j 08:17	17°♏15'21	1°00'13	minimum elong	-361 Sep 03 j 02:15	4°♐44'39	1°26'53
retrograde	-369 Nov 26 j 20:08	19°♏42'26		retrograde	-361 Dec 14 j 05:40	7°♐11'09	
opposition	-368 Feb 12 j 02:25	18°♏20'27	1°06'16	opposition	-360 Feb 29 j 17:12	5°♐49'15	1°34'17
min. Earth dist.	-368 Feb 12 j 23:20	18°♏19'00	29.21280 AU	min. Earth dist.	-360 Mar 01 j 15:16	5°♐47'44	29.26185 AU
direct	-368 May 02 j 19:50	16°♏55'13		direct	-360 May 20 j 19:19	4°♐24'05	
conjunction	-368 Aug 17 j 19:54	19°♏27'02	1°03'54	conjunction	-360 Sep 04 j 12:59	6°♐55'27	1°29'40
minimum elong	-368 Aug 17 j 19:54	19°♏27'02	1°03'54	minimum elong	-360 Sep 04 j 12:59	6°♐55'27	1°29'40
max. Earth dist.	-368 Aug 16 j 19:57	19°♏24'48	31.21595 AU	max. Earth dist.	-360 Sep 03 j 13:58	6°♐53'19	31.26507 AU
retrograde	-368 Nov 28 j 06:56	21°♏54'02		retrograde	-360 Dec 15 j 14:13	9°♐21'56	
opposition	-367 Feb 13 j 13:12	20°♏32'04	1°10'10	opposition	-359 Mar 03 j 04:12	8°♐00'07	1°37'13
min. Earth dist.	-367 Feb 14 j 10:37	20°♏30'35	29.22008 AU	min. Earth dist.	-359 Mar 04 j 01:52	7°♐58'37	29.27027 AU
direct	-367 May 05 j 06:31	19°♏06'49		direct	-359 May 23 j 07:59	6°♐35'01	
max. Earth dist.	-367 Aug 19 j 08:15	21°♏36'25	31.22252 AU				
conjunction	-367 Aug 20 j 07:40	21°♏38'35	1°07'31	conjunction	-359 Sep 06 j 23:40	9°♐06'22	1°32'21
minimum elong	-367 Aug 20 j 07:40	21°♏38'35	1°07'31	minimum elong	-359 Sep 06 j 23:39	9°♐06'22	1°32'22
retrograde	-367 Nov 30 j 16:01	24°♏05'29		max. Earth dist.	-359 Sep 05 j 23:47	9°♐04'08	31.27352 AU
opposition	-366 Feb 15 j 23:59	22°♏43'32	1°13'58	retrograde	-359 Dec 18 j 00:51	11°♐32'51	
min. Earth dist.	-366 Feb 16 j 22:16	22°♏41'59	29.22606 AU	opposition	-358 Mar 05 j 15:13	10°♐11'04	1°40'00
direct	-366 May 07 j 18:54	21°♏18'17		min. Earth dist.	-358 Mar 06 j 12:51	10°♐09'35	29.27875 AU
conjunction	-366 Aug 22 j 19:07	23°♏49'59	1°11'01	direct	-358 May 25 j 17:23	8°♐46'02	
minimum elong	-366 Aug 22 j 19:07	23°♏49'59	1°11'00	max. Earth dist.	-358 Sep 08 j 11:40	11°♐15'14	31.28169 AU
max. Earth dist.	-366 Aug 21 j 18:18	23°♏47'41	31.22805 AU	conjunction	-358 Sep 09 j 10:27	11°♐17'22	1°34'54
retrograde	-366 Dec 03 j 03:42	26°♏16'48		minimum elong	-358 Sep 09 j 10:26	11°♐17'22	1°34'53
opposition	-365 Feb 18 j 10:47	24°♏54'50	1°17'39	retrograde	-358 Dec 20 j 10:07	13°♐43'51	
min. Earth dist.	-365 Feb 19 j 08:42	24°♏53'19	29.23131 AU	opposition	-357 Mar 08 j 02:34	12°♐22'07	1°42'39
direct	-365 May 10 j 07:02	23°♏29'34		min. Earth dist.	-357 Mar 09 j 00:43	12°♐20'36	29.28655 AU
max. Earth dist.	-365 Aug 24 j 06:31	25°♏58'59	31.23295 AU	direct	-357 May 28 j 04:36	10°♐57'09	
conjunction	-365 Aug 25 j 06:24	26°♏01'12	1°14'25	conjunction	-357 Sep 11 j 20:53	13°♐28'25	1°37'18
minimum elong	-365 Aug 25 j 06:24	26°♏01'12	1°14'25	minimum elong	-357 Sep 11 j 20:53	13°♐28'25	1°37'19
retrograde	-365 Dec 05 j 13:37	28°♏27'56		max. Earth dist.	-357 Sep 10 j 21:04	13°♐26'11	31.28902 AU
opposition	-364 Feb 20 j 21:43	27°♏05'57	1°21'14	retrograde	-357 Dec 22 j 21:58	15°♐54'55	
min. Earth dist.	-364 Feb 21 j 20:38	27°♏04'22	29.23614 AU	opposition	-356 Mar 09 j 13:49	14°♐33'12	1°45'09
direct	-364 May 11 j 20:23	25°♏40'40		min. Earth dist.	-356 Mar 10 j 11:21	14°♐31'43	29.29342 AU
conjunction	-364 Aug 26 j 17:28	28°♏12'14	1°17'42	direct	-356 May 29 j 16:17	13°♐08'17	
minimum elong	-364 Aug 26 j 17:28	28°♏12'14	1°17'41	max. Earth dist.	-356 Sep 12 j 08:39	15°♐37'21	31.29514 AU
max. Earth dist.	-364 Aug 25 j 16:47	28°♏09'56	31.23783 AU	conjunction	-356 Sep 13 j 07:35	15°♐39'29	1°39'35
	-364 Oct 19 j 14:56	0°♐		minimum elong	-356 Sep 13 j 07:35	15°♐39'29	1°39'34
retrograde	-364 Dec 07 j 00:45	0°♐38'52		retrograde	-356 Dec 24 j 08:13	18°♐05'58	
	-363 Jan 25 j 23:05	30°♐♏		opposition	-355 Mar 12 j 01:08	16°♐44'16	1°47'30
opposition	-363 Feb 22 j 08:20	29°♏16'54	1°24'41	min. Earth dist.	-355 Mar 12 j 23:43	16°♐42'43	29.29892 AU
min. Earth dist.	-363 Feb 23 j 06:15	29°♏15'23	29.24123 AU	direct	-355 Jun 01 j 04:59	15°♐19'23	
direct	-363 May 14 j 09:20	27°♏51'36		conjunction	-355 Sep 15 j 18:07	17°♐50'31	1°41'42
	-363 Aug 18 j 19:28	0°♐		minimum elong	-355 Sep 15 j 18:07	17°♐50'31	1°41'43
max. Earth dist.	-363 Aug 28 j 04:26	0°♐20'52	31.24311 AU	max. Earth dist.	-355 Sep 14 j 18:19	17°♐48'18	31.29998 AU
conjunction	-363 Aug 29 j 04:34	0°♐23'07	1°20'52	retrograde	-355 Dec 26 j 19:33	20°♐16'58	
minimum elong	-363 Aug 29 j 04:34	0°♐23'07	1°20'53	opposition	-354 Mar 14 j 12:29	18°♐55'15	1°49'42
retrograde	-363 Dec 09 j 09:39	2°♐49'41		min. Earth dist.	-354 Mar 15 j 10:07	18°♐53'47	29.30307 AU
opposition	-362 Feb 24 j 19:20	1°♐27'43	1°28'00	direct	-354 Jun 03 j 17:36	17°♐30'23	
min. Earth dist.	-362 Feb 25 j 18:06	1°♐26'08	29.24705 AU	max. Earth dist.	-354 Sep 17 j 05:07	19°♐59'15	31.30339 AU

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Attention, astronomical year style is used: The year -354 in astronomical counting style is the year 355 BCE in historical counting style.

conjunction	-354 Sep 18 j 04:33	20° 00 01'26	1°43'41	minimum elong	-346 Oct 05 j 11:53	7° 00 24'30	1°53'59
minimum elong	-354 Sep 18 j 04:33	20° 00 01'26	1°43'41	max. Earth dist.	-346 Oct 04 j 16:00	7° 00 22'38	31.32756 AU
retrograde	-354 Dec 29 j 05:14	22° 00 27'52		retrograde	-345 Jan 15 j 14:03	9° 00 51'05	
opposition	-353 Mar 17 j 00:03	21° 00 06'08	1°51'44	opposition	-345 Apr 03 j 20:46	8° 00 29'16	2°02'04
min. Earth dist.	-353 Mar 17 j 22:40	21° 00 04'35	29.30600 AU	min. Earth dist.	-345 Apr 04 j 14:59	8° 00 28'01	29.33076 AU
direct	-353 Jun 06 j 05:50	19° 00 41'16		direct	-345 Jun 24 j 02:50	7° 00 04'46	
conjunction	-353 Sep 20 j 14:52	22° 00 12'13	1°45'31	conjunction	-345 Oct 07 j 21:41	9° 00 35'04	1°54'33
minimum elong	-353 Sep 20 j 14:51	22° 00 12'13	1°45'32	minimum elong	-345 Oct 07 j 21:41	9° 00 35'04	1°54'34
max. Earth dist.	-353 Sep 19 j 15:35	22° 00 10'02	31.30588 AU	max. Earth dist.	-345 Oct 07 j 02:23	9° 00 33'16	31.33102 AU
retrograde	-353 Dec 31 j 15:45	24° 00 38'36		retrograde	-344 Jan 18 j 00:39	12° 00 01'44	
opposition	-352 Mar 18 j 11:24	23° 00 16'49	1°53'37	opposition	-344 Apr 05 j 08:43	10° 00 39'55	2°02'36
min. Earth dist.	-352 Mar 19 j 09:06	23° 00 15'20	29.30808 AU	min. Earth dist.	-344 Apr 06 j 03:42	10° 00 38'38	29.33382 AU
direct	-352 Jun 07 j 19:47	21° 00 51'57		direct	-344 Jun 25 j 14:30	9° 00 15'31	
max. Earth dist.	-352 Sep 21 j 01:38	24° 00 20'37	31.30767 AU				
conjunction	-352 Sep 22 j 00:59	24° 00 22'47	1°47'12	conjunction	-344 Oct 09 j 07:25	11° 00 45'46	1°54'57
minimum elong	-352 Sep 22 j 00:59	24° 00 22'47	1°47'12	minimum elong	-344 Oct 09 j 07:25	11° 00 45'46	1°54'57
retrograde	-351 Jan 02 j 01:27	26° 00 49'09		max. Earth dist.	-344 Oct 08 j 12:31	11° 00 43'59	31.33346 AU
opposition	-351 Mar 20 j 22:53	25° 00 27'19	1°55'19	retrograde	-343 Jan 19 j 11:59	14° 00 12'29	
min. Earth dist.	-351 Mar 21 j 20:54	25° 00 25'49	29.30987 AU	opposition	-343 Apr 07 j 20:42	12° 00 50'41	2°02'56
direct	-351 Jun 10 j 06:50	24° 00 02'28		min. Earth dist.	-343 Apr 08 j 14:39	12° 00 49'28	29.33545 AU
				direct	-343 Jun 28 j 04:19	11° 00 26'20	
conjunction	-351 Sep 24 j 11:02	26° 00 33'11	1°48'44	conjunction	-343 Oct 11 j 17:05	13° 00 56'31	1°55'12
minimum elong	-351 Sep 24 j 11:02	26° 00 33'11	1°48'44	minimum elong	-343 Oct 11 j 17:05	13° 00 56'31	1°55'12
max. Earth dist.	-351 Sep 23 j 12:53	26° 00 31'06	31.30945 AU	max. Earth dist.	-343 Oct 10 j 21:58	13° 00 54'44	31.33429 AU
retrograde	-350 Jan 04 j 09:24	28° 00 59'30		retrograde	-342 Jan 21 j 22:34	16° 00 23'19	
opposition	-350 Mar 23 j 10:22	27° 00 37'39	1°56'53	opposition	-342 Apr 10 j 08:50	15° 00 01'30	2°03'06
min. Earth dist.	-350 Mar 24 j 07:37	27° 00 36'12	29.31179 AU	min. Earth dist.	-342 Apr 11 j 03:06	15° 00 00'15	29.33560 AU
direct	-350 Jun 12 j 19:51	26° 00 12'48		direct	-342 Jun 30 j 15:24	13° 00 37'12	
				max. Earth dist.	-342 Oct 13 j 08:49	16° 00 05'37	31.33367 AU
conjunction	-350 Sep 26 j 20:55	28° 00 43'25	1°50'06	conjunction	-342 Oct 14 j 02:50	16° 00 07'18	1°55'16
minimum elong	-350 Sep 26 j 20:54	28° 00 43'25	1°50'05	minimum elong	-342 Oct 14 j 02:50	16° 00 07'18	1°55'16
max. Earth dist.	-350 Sep 25 j 22:22	28° 00 41'18	31.31173 AU	retrograde	-341 Jan 24 j 07:04	18° 00 34'09	
	-350 Nov 01 j 16:09	0° 00 00'00		opposition	-341 Apr 12 j 21:00	17° 00 12'18	2°03'06
retrograde	-349 Jan 06 j 19:40	1° 00 09'45		min. Earth dist.	-341 Apr 13 j 14:41	17° 00 11'06	29.33413 AU
	-349 Mar 18 j 11:28	30° 00 00'00		direct	-341 Jul 03 j 04:37	15° 00 48'02	
opposition	-349 Mar 25 j 21:57	29° 00 47'53	1°58'16				
min. Earth dist.	-349 Mar 26 j 18:26	29° 00 46'29	29.31462 AU	conjunction	-341 Oct 16 j 12:16	18° 00 18'02	1°55'11
direct	-349 Jun 15 j 05:41	28° 00 23'04		minimum elong	-341 Oct 16 j 12:16	18° 00 18'02	1°55'11
	-349 Sep 04 j 21:01	0° 00 00'00		max. Earth dist.	-341 Oct 15 j 17:35	18° 00 16'17	31.33156 AU
max. Earth dist.	-349 Sep 28 j 09:54	0° 00 51'38	31.31494 AU	retrograde	-340 Jan 26 j 17:32	20° 00 44'56	
conjunction	-349 Sep 29 j 06:43	0° 00 53'35	1°51'19	opposition	-340 Apr 14 j 09:07	19° 00 23'01	2°02'55
minimum elong	-349 Sep 29 j 06:43	0° 00 53'35	1°51'19	min. Earth dist.	-340 Apr 15 j 02:16	19° 00 21'52	29.33144 AU
retrograde	-348 Jan 09 j 04:31	3° 00 19'58		direct	-340 Jul 04 j 15:09	17° 00 58'46	
opposition	-348 Mar 27 j 09:36	1° 00 58'05	1°59'28				
min. Earth dist.	-348 Mar 28 j 05:59	1° 00 56'41	29.31820 AU	conjunction	-340 Oct 17 j 21:51	20° 00 28'40	1°54'56
direct	-348 Jun 16 j 17:04	0° 00 33'20		minimum elong	-340 Oct 17 j 21:51	20° 00 28'40	1°54'55
				max. Earth dist.	-340 Oct 17 j 04:41	20° 00 27'03	31.32833 AU
conjunction	-348 Sep 30 j 16:26	3° 00 03'47	1°52'22	retrograde	-339 Jan 28 j 02:18	22° 00 55'36	
minimum elong	-348 Sep 30 j 16:26	3° 00 03'47	1°52'21	opposition	-339 Apr 16 j 21:11	21° 00 33'38	2°02'34
max. Earth dist.	-348 Sep 29 j 19:13	3° 00 01'48	31.31896 AU	min. Earth dist.	-339 Apr 17 j 14:25	21° 00 32'28	29.32776 AU
retrograde	-347 Jan 10 j 15:58	5° 00 30'12		direct	-339 Jul 07 j 03:18	20° 00 09'23	
opposition	-347 Mar 29 j 21:03	4° 00 08'21	2°00'31				
min. Earth dist.	-347 Mar 30 j 16:12	4° 00 07'02	29.32248 AU	conjunction	-339 Oct 20 j 07:08	22° 00 39'08	1°54'31
direct	-347 Jun 19 j 03:47	2° 00 43'40		minimum elong	-339 Oct 20 j 07:08	22° 00 39'08	1°54'31
max. Earth dist.	-347 Oct 02 j 06:33	5° 00 12'14	31.32330 AU	max. Earth dist.	-339 Oct 19 j 13:44	22° 00 37'30	31.32457 AU
				retrograde	-338 Jan 30 j 13:07	25° 00 06'08	
conjunction	-347 Oct 03 j 02:19	5° 00 14'05	1°53'16	opposition	-338 Apr 19 j 09:21	23° 00 44'05	2°02'03
minimum elong	-347 Oct 03 j 02:19	5° 00 14'05	1°53'16	min. Earth dist.	-338 Apr 20 j 01:04	23° 00 43'01	29.32400 AU
retrograde	-346 Jan 13 j 02:22	7° 00 40'34		direct	-338 Jul 09 j 14:14	22° 00 19'51	
opposition	-346 Apr 01 j 08:56	6° 00 18'44	2°01'23				
min. Earth dist.	-346 Apr 02 j 04:35	6° 00 17'24	29.32683 AU	conjunction	-338 Oct 22 j 16:22	24° 00 49'29	1°53'57
direct	-346 Jun 21 j 15:12	4° 00 54'09		minimum elong	-338 Oct 22 j 16:22	24° 00 49'29	1°53'56
				max. Earth dist.	-338 Oct 22 j 00:41	24° 00 48'01	31.32089 AU
conjunction	-346 Oct 05 j 11:54	7° 00 24'30	1°53'59	retrograde	-337 Feb 01 j 22:58	27° 00 16'33	

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Attention, astronomical year style is used: The year -337 in astronomical counting style is the year 338 BCE in historical counting style.

opposition	-337 Apr 21 j 21:42	25° ♂ 54'25	2°01'21	opposition	-329 May 10 j 01:03	13° ♂ 18'34	1°49'36
min. Earth dist.	-337 Apr 22 j 13:26	25° ♂ 53'21	29.32064 AU	min. Earth dist.	-329 May 10 j 10:03	13° ♂ 17'57	29.30019 AU
direct	-337 Jul 12 j 01:02	24° ♂ 30'12		direct	-329 Jul 29 j 22:23	11° ♂ 54'49	
max. Earth dist.	-337 Oct 24 j 10:17	26° ♂ 58'18	31.31800 AU				
				conjunction	-329 Nov 11 j 02:59	14° ♂ 23'44	1°41'35
conjunction	-337 Oct 25 j 01:33	26° ♂ 59'45	1°53'13	minimum elong	-329 Nov 11 j 03:00	14° ♂ 23'44	1°41'36
minimum elong	-337 Oct 25 j 01:33	26° ♂ 59'45	1°53'13	max. Earth dist.	-329 Nov 10 j 17:49	14° ♂ 22'52	31.29596 AU
retrograde	-336 Feb 04 j 10:13	29° ♂ 26'52			-329 Nov 27 j 06:36	15° ♂	
opposition	-336 Apr 23 j 09:42	28° ♂ 04'42	2°00'28	retrograde	-328 Feb 21 j 23:56	16° ♂ 51'46	
min. Earth dist.	-336 Apr 23 j 23:26	28° ♂ 03'46	29.31811 AU	opposition	-328 May 11 j 13:41	15° ♂ 29'19	1°47'24
direct	-336 Jul 13 j 11:52	26° ♂ 40'31		min. Earth dist.	-328 May 11 j 23:07	15° ♂ 28'40	29.29344 AU
					-328 May 30 j 01:27	15° ♂	
conjunction	-336 Oct 26 j 10:46	29° ♂ 09'59	1°52'19	direct	-328 Jul 31 j 09:02	14° ♂ 05'35	
minimum elong	-336 Oct 26 j 10:46	29° ♂ 09'59	1°52'18		-328 Sep 28 j 07:01	15° ♂	
max. Earth dist.	-336 Oct 25 j 20:27	29° ♂ 08'38	31.31586 AU				
	-336 Nov 18 j 00:09	0° ♂		conjunction	-328 Nov 12 j 12:10	16° ♂ 34'25	1°39'27
retrograde	-335 Feb 05 j 21:19	1° ♂ 37'12		minimum elong	-328 Nov 12 j 12:10	16° ♂ 34'25	1°39'27
opposition	-335 Apr 25 j 22:02	0° ♂ 14'59	1°59'26	max. Earth dist.	-328 Nov 12 j 03:15	16° ♂ 33'34	31.28877 AU
min. Earth dist.	-335 Apr 26 j 11:52	0° ♂ 14'03	29.31636 AU	retrograde	-327 Feb 23 j 11:28	19° ♂ 02'33	
	-335 May 05 j 04:49	30° ♂		opposition	-327 May 14 j 02:17	17° ♂ 40'00	1°45'03
direct	-335 Jul 15 j 23:36	28° ♂ 50'53		min. Earth dist.	-327 May 14 j 09:56	17° ♂ 39'29	29.28567 AU
	-335 Sep 21 j 06:51	0° ♂		direct	-327 Aug 02 j 20:13	16° ♂ 16'16	
conjunction	-335 Oct 28 j 19:52	1° ♂ 20'15	1°51'15	conjunction	-327 Nov 14 j 21:09	18° ♂ 45'00	1°37'11
minimum elong	-335 Oct 28 j 19:53	1° ♂ 20'15	1°51'15	minimum elong	-327 Nov 14 j 21:09	18° ♂ 45'00	1°37'12
max. Earth dist.	-335 Oct 28 j 06:47	1° ♂ 19'01	31.31448 AU	max. Earth dist.	-327 Nov 14 j 13:01	18° ♂ 44'14	31.28069 AU
retrograde	-334 Feb 08 j 09:02	3° ♂ 47'35		retrograde	-326 Feb 25 j 22:52	21° ♂ 13'15	
opposition	-334 Apr 28 j 10:18	2° ♂ 25'21	1°58'13	opposition	-326 May 16 j 15:07	19° ♂ 50'36	1°42'34
min. Earth dist.	-334 Apr 28 j 22:30	2° ♂ 24'31	29.31502 AU	min. Earth dist.	-326 May 16 j 22:51	19° ♂ 50'05	29.27750 AU
direct	-334 Jul 18 j 12:43	1° ♂ 01'18		direct	-326 Aug 05 j 07:48	18° ♂ 26'54	
conjunction	-334 Oct 31 j 04:58	3° ♂ 30'37	1°50'02	conjunction	-326 Nov 17 j 06:12	20° ♂ 55'31	1°34'47
minimum elong	-334 Oct 31 j 04:58	3° ♂ 30'37	1°50'01	minimum elong	-326 Nov 17 j 06:12	20° ♂ 55'31	1°34'46
max. Earth dist.	-334 Oct 30 j 16:08	3° ♂ 29'25	31.31327 AU	max. Earth dist.	-326 Nov 16 j 23:33	20° ♂ 54'53	31.27268 AU
retrograde	-333 Feb 10 j 20:11	5° ♂ 58'04		retrograde	-325 Feb 28 j 10:46	23° ♂ 23'52	
opposition	-333 Apr 30 j 22:44	4° ♂ 35'49	1°56'49	opposition	-325 May 19 j 03:42	22° ♂ 01'08	1°39'55
min. Earth dist.	-333 May 01 j 10:44	4° ♂ 35'00	29.31385 AU	min. Earth dist.	-325 May 19 j 09:35	22° ♂ 00'44	29.26963 AU
direct	-333 Jul 20 j 23:12	3° ♂ 11'50		direct	-325 Aug 07 j 20:32	20° ♂ 37'26	
conjunction	-333 Nov 02 j 14:08	5° ♂ 41'05	1°48'39	conjunction	-325 Nov 19 j 15:05	23° ♂ 05'59	1°32'15
minimum elong	-333 Nov 02 j 14:08	5° ♂ 41'05	1°48'39	minimum elong	-325 Nov 19 j 15:05	23° ♂ 05'59	1°32'15
max. Earth dist.	-333 Nov 02 j 02:56	5° ♂ 40'02	31.31194 AU	max. Earth dist.	-325 Nov 19 j 08:48	23° ♂ 05'24	31.26518 AU
retrograde	-332 Feb 13 j 05:37	8° ♂ 08'39		retrograde	-324 Mar 01 j 22:13	25° ♂ 34'28	
opposition	-332 May 02 j 11:12	6° ♂ 46'23	1°55'16	opposition	-324 May 20 j 16:24	24° ♂ 11'40	1°37'08
min. Earth dist.	-332 May 02 j 22:19	6° ♂ 45'38	29.31208 AU	min. Earth dist.	-324 May 20 j 21:42	24° ♂ 11'19	29.26263 AU
direct	-332 Jul 22 j 12:24	5° ♂ 22'29		direct	-324 Aug 09 j 06:49	22° ♂ 48'00	
conjunction	-332 Nov 03 j 23:14	7° ♂ 51'40	1°47'06	conjunction	-324 Nov 21 j 00:07	25° ♂ 16'29	1°29'34
minimum elong	-332 Nov 03 j 23:14	7° ♂ 51'40	1°47'05	minimum elong	-324 Nov 21 j 00:08	25° ♂ 16'29	1°29'33
max. Earth dist.	-332 Nov 03 j 11:34	7° ♂ 50'34	31.30979 AU	max. Earth dist.	-324 Nov 20 j 19:54	25° ♂ 16'05	31.25868 AU
retrograde	-331 Feb 14 j 17:04	10° ♂ 19'20		retrograde	-323 Mar 04 j 08:07	27° ♂ 45'06	
opposition	-331 May 04 j 23:37	8° ♂ 57'03	1°53'32	opposition	-323 May 23 j 05:01	26° ♂ 22'15	1°34'13
min. Earth dist.	-331 May 05 j 10:01	8° ♂ 56'21	29.30945 AU	min. Earth dist.	-323 May 23 j 08:55	26° ♂ 22'00	29.25649 AU
direct	-331 Jul 24 j 23:19	7° ♂ 33'13		direct	-323 Aug 11 j 20:04	24° ♂ 58'39	
conjunction	-331 Nov 06 j 08:34	10° ♂ 02'19	1°45'25	conjunction	-323 Nov 23 j 09:03	27° ♂ 27'05	1°26'46
minimum elong	-331 Nov 06 j 08:35	10° ♂ 02'19	1°45'25	minimum elong	-323 Nov 23 j 09:03	27° ♂ 27'05	1°26'46
max. Earth dist.	-331 Nov 05 j 22:30	10° ♂ 01'22	31.30656 AU	max. Earth dist.	-323 Nov 23 j 04:51	27° ♂ 26'41	31.25316 AU
retrograde	-330 Feb 17 j 02:37	12° ♂ 30'07		retrograde	-322 Mar 06 j 20:32	29° ♂ 55'51	
opposition	-330 May 07 j 12:23	11° ♂ 07'47	1°51'39	opposition	-322 May 25 j 17:48	28° ♂ 32'58	1°31'09
min. Earth dist.	-330 May 07 j 22:44	11° ♂ 07'05	29.30549 AU	min. Earth dist.	-322 May 25 j 20:22	28° ♂ 32'48	29.25140 AU
direct	-330 Jul 27 j 11:36	9° ♂ 44'01		direct	-322 Aug 14 j 07:10	27° ♂ 09'27	
conjunction	-330 Nov 08 j 17:40	12° ♂ 13'01	1°43'34	conjunction	-322 Nov 25 j 18:04	29° ♂ 37'50	1°23'50
minimum elong	-330 Nov 08 j 17:40	12° ♂ 13'01	1°43'34	minimum elong	-322 Nov 25 j 18:04	29° ♂ 37'50	1°23'49
max. Earth dist.	-330 Nov 08 j 07:17	12° ♂ 12'02	31.30201 AU	max. Earth dist.	-322 Nov 25 j 15:58	29° ♂ 37'38	31.24838 AU
retrograde	-329 Feb 19 j 13:50	14° ♂ 40'57			-322 Dec 05 j 13:11	0° ♂	

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Attention, astronomical year style is used: The year -321 in astronomical counting style is the year 322 BCE in historical counting style.

retrograde	-321 Mar 09 j 06:32	2°♂06'46		opposition	-313 Jun 15 j 14:30	18°♂15'02	0°58'07
opposition	-321 May 28 j 06:40	0°♂43'52	1°27'57	min. Earth dist.	-313 Jun 15 j 10:06	18°♂15'20	29.18429 AU
min. Earth dist.	-321 May 28 j 08:47	0°♂43'43	29.24673 AU	direct	-313 Sep 03 j 12:58	16°♂51'48	
	-321 Jun 25 j 18:58	30°♂					
direct	-321 Aug 16 j 19:08	29°♂20'25		conjunction	-313 Dec 15 j 05:40	19°♂19'37	0°52'28
	-321 Oct 05 j 06:47	0°♂		minimum elong	-313 Dec 15 j 05:40	19°♂19'37	0°52'28
				max. Earth dist.	-313 Dec 15 j 10:33	19°♂20'05	31.17875 AU
conjunction	-321 Nov 28 j 03:07	1°♂48'45	1°20'47	retrograde	-312 Mar 28 j 15:40	21°♂49'50	
minimum elong	-321 Nov 28 j 03:07	1°♂48'45	1°20'47	opposition	-312 Jun 17 j 03:23	20°♂26'19	0°53'57
max. Earth dist.	-321 Nov 28 j 01:10	1°♂48'34	31.24394 AU	min. Earth dist.	-312 Jun 16 j 22:27	20°♂26'39	29.17396 AU
retrograde	-320 Mar 10 j 17:41	4°♂17'51		direct	-312 Sep 05 j 01:10	19°♂03'06	
opposition	-320 May 29 j 19:18	2°♂54'57	1°24'37				
min. Earth dist.	-320 May 29 j 19:50	2°♂54'55	29.24220 AU	conjunction	-312 Dec 16 j 15:00	21°♂30'51	0°48'32
direct	-320 Aug 18 j 05:36	1°♂31'34		minimum elong	-312 Dec 16 j 15:00	21°♂30'51	0°48'31
				max. Earth dist.	-312 Dec 16 j 20:16	21°♂31'21	31.16895 AU
conjunction	-320 Nov 29 j 12:21	3°♂59'52	1°17'36	retrograde	-311 Mar 31 j 03:25	24°♂01'13	
minimum elong	-320 Nov 29 j 12:21	3°♂59'52	1°17'35	opposition	-311 Jun 19 j 16:20	22°♂37'37	0°49'42
max. Earth dist.	-320 Nov 29 j 11:46	3°♂59'49	31.23919 AU	min. Earth dist.	-311 Jun 19 j 09:31	22°♂38'05	29.16461 AU
retrograde	-319 Mar 13 j 04:15	6°♂29'09		direct	-311 Sep 07 j 12:24	21°♂14'25	
opposition	-319 Jun 01 j 08:20	5°♂06'13	1°21'09				
min. Earth dist.	-319 Jun 01 j 09:03	5°♂06'10	29.23716 AU	conjunction	-311 Dec 19 j 00:20	23°♂42'08	0°44'31
direct	-319 Aug 20 j 15:47	3°♂42'55		minimum elong	-311 Dec 19 j 00:20	23°♂42'08	0°44'32
				max. Earth dist.	-311 Dec 19 j 07:10	23°♂42'47	31.16003 AU
conjunction	-319 Dec 01 j 21:28	6°♂11'09	1°14'18	retrograde	-310 Apr 02 j 14:17	26°♂12'40	
minimum elong	-319 Dec 01 j 21:28	6°♂11'09	1°14'19	opposition	-310 Jun 22 j 05:29	24°♂49'01	0°45'23
max. Earth dist.	-319 Dec 01 j 21:28	6°♂11'09	31.23388 AU	min. Earth dist.	-310 Jun 21 j 22:30	24°♂49'30	29.15616 AU
retrograde	-318 Mar 15 j 16:25	8°♂40'36		direct	-310 Sep 09 j 23:05	23°♂25'52	
opposition	-318 Jun 03 j 21:18	7°♂17'38	1°17'34				
min. Earth dist.	-318 Jun 03 j 20:12	7°♂17'42	29.23126 AU	conjunction	-310 Dec 21 j 09:50	25°♂53'33	0°40'27
direct	-318 Aug 23 j 02:44	5°♂54'23		minimum elong	-310 Dec 21 j 09:50	25°♂53'33	0°40'26
				max. Earth dist.	-310 Dec 21 j 17:39	25°♂54'17	31.15212 AU
conjunction	-318 Dec 04 j 06:50	8°♂22'34	1°10'54	retrograde	-309 Apr 05 j 02:34	28°♂24'16	
minimum elong	-318 Dec 04 j 06:50	8°♂22'35	1°10'54	opposition	-309 Jun 24 j 18:18	27°♂00'35	0°40'59
max. Earth dist.	-318 Dec 04 j 07:12	8°♂22'37	31.22737 AU	min. Earth dist.	-309 Jun 24 j 09:15	27°♂01'12	29.14853 AU
retrograde	-317 Mar 18 j 04:36	10°♂52'11		direct	-309 Sep 12 j 09:55	25°♂37'29	
opposition	-317 Jun 06 j 10:22	9°♂29'09	1°13'53				
min. Earth dist.	-317 Jun 06 j 09:39	9°♂29'12	29.22417 AU	conjunction	-309 Dec 23 j 19:21	28°♂05'09	0°36'18
direct	-317 Aug 25 j 13:21	8°♂05'57		minimum elong	-309 Dec 23 j 19:21	28°♂05'09	0°36'19
				max. Earth dist.	-309 Dec 24 j 03:43	28°♂05'56	31.14470 AU
conjunction	-317 Dec 06 j 16:15	10°♂34'04	1°07'24		-308 Feb 19 j 05:14	0°♂	
minimum elong	-317 Dec 06 j 16:15	10°♂34'04	1°07'24	retrograde	-308 Apr 06 j 14:53	0°♂36'04	
max. Earth dist.	-317 Dec 06 j 17:47	10°♂34'13	31.21963 AU		-308 May 26 j 02:46	30°♂	
retrograde	-316 Mar 19 j 17:00	13°♂03'49		opposition	-308 Jun 26 j 07:25	29°♂12'21	0°36'31
opposition	-316 Jun 07 j 23:20	11°♂40'43	1°10'05	min. Earth dist.	-308 Jun 25 j 22:30	29°♂12'58	29.14128 AU
min. Earth dist.	-316 Jun 07 j 21:12	11°♂40'51	29.21555 AU	direct	-308 Sep 13 j 19:44	27°♂49'19	
direct	-316 Aug 27 j 01:15	10°♂17'31			-308 Dec 17 j 17:31	0°♂	
conjunction	-316 Dec 08 j 01:33	12°♂45'34	1°03'48	conjunction	-308 Dec 25 j 04:59	0°♂16'59	0°32'06
minimum elong	-316 Dec 08 j 01:33	12°♂45'35	1°03'47	minimum elong	-308 Dec 25 j 04:59	0°♂16'59	0°32'05
max. Earth dist.	-316 Dec 08 j 02:52	12°♂45'42	31.21037 AU	max. Earth dist.	-308 Dec 25 j 14:57	0°♂17'56	31.13752 AU
retrograde	-315 Mar 22 j 05:15	15°♂15'27		retrograde	-307 Apr 09 j 03:35	2°♂48'05	
opposition	-315 Jun 10 j 12:25	13°♂52'15	1°06'11	opposition	-307 Jun 28 j 20:27	1°♂24'22	0°32'00
min. Earth dist.	-315 Jun 10 j 10:13	13°♂52'24	29.20570 AU	min. Earth dist.	-307 Jun 28 j 09:55	1°♂25'05	29.13392 AU
direct	-315 Aug 29 j 11:40	12°♂29'02		direct	-307 Sep 16 j 06:43	0°♂01'23	
conjunction	-315 Dec 10 j 11:01	14°♂57'01	1°00'06	conjunction	-307 Dec 27 j 14:41	2°♂29'04	0°27'51
minimum elong	-315 Dec 10 j 11:02	14°♂57'01	1°00'06	minimum elong	-307 Dec 27 j 14:41	2°♂29'04	0°27'51
max. Earth dist.	-315 Dec 10 j 14:06	14°♂57'18	31.20010 AU	max. Earth dist.	-307 Dec 28 j 00:31	2°♂30'00	31.13002 AU
retrograde	-314 Mar 24 j 16:31	17°♂27'00		retrograde	-306 Apr 11 j 17:05	5°♂00'23	
opposition	-314 Jun 13 j 01:29	16°♂03'41	1°02'12	opposition	-306 Jul 01 j 09:40	3°♂36'37	0°27'25
min. Earth dist.	-314 Jun 12 j 22:11	16°♂03'54	29.19499 AU	min. Earth dist.	-306 Jun 30 j 23:06	3°♂37'20	29.12620 AU
direct	-314 Sep 01 j 01:23	14°♂40'28		direct	-306 Sep 18 j 16:16	2°♂13'41	
conjunction	-314 Dec 12 j 20:12	17°♂08'21	0°56'20	conjunction	-306 Dec 30 j 00:40	4°♂41'23	0°23'33
minimum elong	-314 Dec 12 j 20:13	17°♂08'21	0°56'18	minimum elong	-306 Dec 30 j 00:40	4°♂41'23	0°23'32
max. Earth dist.	-314 Dec 12 j 23:09	17°♂08'38	31.18935 AU	max. Earth dist.	-306 Dec 30 j 12:08	4°♂42'28	31.12182 AU
retrograde	-313 Mar 27 j 05:43	19°♂38'27		retrograde	-305 Apr 14 j 05:56	7°♂12'52	

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Attention, astronomical year style is used: The year -305 in astronomical counting style is the year 306 BCE in historical counting style.

opposition	-305 Jul 03 j 22:49	5° $\overline{3}$ 49'04	0°22'48	max. Earth dist.	-298 Jan 14 j 15:45	20° $\overline{3}$ 10'45	31.04031 AU
min. Earth dist.	-305 Jul 03 j 11:26	5° $\overline{3}$ 49'51	29.11738 AU	retrograde	-298 Apr 29 j 19:04	22° $\overline{3}$ 41'40	
direct	-305 Sep 21 j 05:24	4° $\overline{3}$ 26'11		opposition	-298 Jul 19 j 18:00	21° $\overline{3}$ 17'15	0°-10'-3
				min. Earth dist.	-298 Jul 19 j 01:30	21° $\overline{3}$ 18'22	29.03522 AU
conjunction	-304 Jan 01 j 10:41	6° $\overline{3}$ 53'53	0°19'13	direct	-298 Oct 06 j 13:25	19° $\overline{3}$ 54'15	
minimum elong	-304 Jan 01 j 10:41	6° $\overline{3}$ 53'53	0°19'13				
max. Earth dist.	-304 Jan 01 j 21:30	6° $\overline{3}$ 54'54	31.11242 AU	conjunction	-297 Jan 16 j 09:54	22° $\overline{3}$ 21'45	0°-11'-36
retrograde	-304 Apr 15 j 20:38	9° $\overline{3}$ 25'32		minimum elong	-297 Jan 16 j 09:54	22° $\overline{3}$ 21'45	0°11'38
opposition	-304 Jul 05 j 11:52	8° $\overline{3}$ 01'41	0°18'09	behind sun begin	-297 Jan 16 j 05:16	22° $\overline{3}$ 21'20	
min. Earth dist.	-304 Jul 04 j 23:55	8° $\overline{3}$ 02'29	29.10732 AU	behind sun end	-297 Jan 16 j 14:31	22° $\overline{3}$ 22'10	
direct	-304 Sep 22 j 16:40	6° $\overline{3}$ 38'48		max. Earth dist.	-297 Jan 17 j 01:57	22° $\overline{3}$ 23'16	31.03014 AU
				retrograde	-297 May 02 j 08:35	24° $\overline{3}$ 54'21	
conjunction	-303 Jan 02 j 20:53	9° $\overline{3}$ 06'30	0°14'52	opposition	-297 Jul 22 j 06:58	23° $\overline{3}$ 29'51	0°-14'-45
minimum elong	-303 Jan 02 j 20:54	9° $\overline{3}$ 06'30	0°14'51	min. Earth dist.	-297 Jul 21 j 14:17	23° $\overline{3}$ 31'00	29.02566 AU
behind sun begin	-303 Jan 02 j 18:13	9° $\overline{3}$ 06'15		direct	-297 Oct 08 j 23:05	22° $\overline{3}$ 06'51	
behind sun end	-303 Jan 02 j 23:34	9° $\overline{3}$ 06'44					
max. Earth dist.	-303 Jan 03 j 09:03	9° $\overline{3}$ 07'38	31.10160 AU	conjunction	-296 Jan 18 j 20:24	24° $\overline{3}$ 34'22	0°-15'-58
retrograde	-303 Apr 18 j 07:41	11° $\overline{3}$ 38'18		minimum elong	-296 Jan 18 j 20:24	24° $\overline{3}$ 34'22	0°15'59
opposition	-303 Jul 08 j 01:07	10° $\overline{3}$ 14'22	0°13'29	behind sun begin	-296 Jan 18 j 19:23	24° $\overline{3}$ 34'17	
min. Earth dist.	-303 Jul 07 j 13:07	10° $\overline{3}$ 15'11	29.09580 AU	behind sun end	-296 Jan 18 j 21:26	24° $\overline{3}$ 34'28	
direct	-303 Sep 25 j 04:50	8° $\overline{3}$ 51'29		max. Earth dist.	-296 Jan 19 j 14:20	24° $\overline{3}$ 36'04	31.02099 AU
				retrograde	-296 May 03 j 21:13	27° $\overline{3}$ 07'07	
conjunction	-302 Jan 05 j 06:55	11° $\overline{3}$ 19'08	0°10'29	opposition	-296 Jul 23 j 19:45	25° $\overline{3}$ 42'35	0°-19'-26
minimum elong	-302 Jan 05 j 06:55	11° $\overline{3}$ 19'08	0°10'30	min. Earth dist.	-296 Jul 23 j 02:00	25° $\overline{3}$ 43'48	29.01690 AU
behind sun begin	-302 Jan 05 j 01:52	11° $\overline{3}$ 18'41		direct	-296 Oct 10 j 11:13	24° $\overline{3}$ 19'36	
behind sun end	-302 Jan 05 j 11:58	11° $\overline{3}$ 19'36					
max. Earth dist.	-302 Jan 05 j 19:02	11° $\overline{3}$ 20'16	31.08963 AU	conjunction	-295 Jan 20 j 06:52	26° $\overline{3}$ 47'09	0°-20'-20
retrograde	-302 Apr 20 j 20:31	13° $\overline{3}$ 51'04		minimum elong	-295 Jan 20 j 06:52	26° $\overline{3}$ 47'09	0°20'22
opposition	-302 Jul 10 j 14:13	12° $\overline{3}$ 27'02	0°08'47	max. Earth dist.	-295 Jan 21 j 00:30	26° $\overline{3}$ 48'49	31.01268 AU
min. Earth dist.	-302 Jul 10 j 00:58	12° $\overline{3}$ 27'56	29.08334 AU	retrograde	-295 May 06 j 12:05	29° $\overline{3}$ 20'03	
direct	-302 Sep 27 j 17:11	11° $\overline{3}$ 04'08		opposition	-295 Jul 26 j 08:43	27° $\overline{3}$ 55'28	0°-24'-5
				min. Earth dist.	-295 Jul 25 j 14:12	27° $\overline{3}$ 56'44	29.00892 AU
conjunction	-301 Jan 07 j 17:05	13° $\overline{3}$ 31'44	0°06'07	direct	-295 Oct 12 j 21:26	26° $\overline{3}$ 32'31	
minimum elong	-301 Jan 07 j 17:05	13° $\overline{3}$ 31'44	0°06'06				
behind sun begin	-301 Jan 07 j 10:59	13° $\overline{3}$ 31'11		conjunction	-294 Jan 22 j 17:31	29° $\overline{3}$ 00'06	0°-24'-41
behind sun end	-301 Jan 07 j 23:11	13° $\overline{3}$ 32'18		minimum elong	-294 Jan 22 j 17:31	29° $\overline{3}$ 00'06	0°24'41
max. Earth dist.	-301 Jan 08 j 06:12	13° $\overline{3}$ 32'58	31.07679 AU	max. Earth dist.	-294 Jan 23 j 12:43	29° $\overline{3}$ 01'55	31.00475 AU
retrograde	-301 Apr 23 j 08:09	16° $\overline{3}$ 03'47			-294 Feb 18 j 18:22	0° \approx	
opposition	-301 Jul 13 j 03:12	14° $\overline{3}$ 39'39	0°04'05	retrograde	-294 May 09 j 00:15	1° \approx 33'09	
min. Earth dist.	-301 Jul 12 j 14:17	14° $\overline{3}$ 40'32	29.07042 AU	opposition	-294 Jul 28 j 21:42	0° \approx 08'33	0°-28'-43
direct	-301 Sep 30 j 04:49	13° $\overline{3}$ 16'42		min. Earth dist.	-294 Jul 28 j 03:08	0° \approx 09'50	29.00102 AU
					-294 Aug 03 j 02:41	30° \overline{R} $\overline{3}$	
conjunction	-300 Jan 10 j 03:18	15° $\overline{3}$ 44'16	0°01'42	direct	-294 Oct 15 j 09:05	28° $\overline{3}$ 45'38	
minimum elong	-300 Jan 10 j 03:17	15° $\overline{3}$ 44'16	0°01'42		-294 Dec 22 j 13:34	0° \approx	
behind sun begin	-300 Jan 09 j 20:53	15° $\overline{3}$ 43'42					
behind sun end	-300 Jan 10 j 09:42	15° $\overline{3}$ 44'51		conjunction	-293 Jan 25 j 04:24	1° \approx 13'15	0°-28'-59
max. Earth dist.	-300 Jan 10 j 17:12	15° $\overline{3}$ 45'35	31.06397 AU	minimum elong	-293 Jan 25 j 04:23	1° \approx 13'15	0°29'01
retrograde	-300 Apr 24 j 19:54	18° $\overline{3}$ 16'27		max. Earth dist.	-293 Jan 25 j 23:30	1° \approx 15'03	30.99682 AU
desc. node	-300 May 25 j 23:00	18° $\overline{3}$ 01'25		retrograde	-293 May 11 j 15:02	3° \approx 46'27	
opposition	-300 Jul 14 j 16:06	16° $\overline{3}$ 52'12	0°00'-37	opposition	-293 Jul 31 j 10:27	2° \approx 21'49	0°-33'-18
min. Earth dist.	-300 Jul 14 j 01:18	16° $\overline{3}$ 53'12	29.05778 AU	min. Earth dist.	-293 Jul 30 j 14:56	2° \approx 23'10	28.99290 AU
direct	-300 Oct 01 j 16:36	15° $\overline{3}$ 29'13		direct	-293 Oct 17 j 21:04	0° \approx 58'55	
conjunction	-299 Jan 11 j 13:19	17° $\overline{3}$ 56'45	0°-2'-49	conjunction	-292 Jan 27 j 15:26	3° \approx 26'35	0°-33'-15
minimum elong	-299 Jan 11 j 13:19	17° $\overline{3}$ 56'45	0°02'51	minimum elong	-292 Jan 27 j 15:26	3° \approx 26'35	0°33'16
behind sun begin	-299 Jan 11 j 06:55	17° $\overline{3}$ 56'10		max. Earth dist.	-292 Jan 28 j 11:06	3° \approx 28'26	30.98819 AU
behind sun end	-299 Jan 11 j 19:43	17° $\overline{3}$ 57'20		retrograde	-292 May 13 j 03:57	5° \approx 59'56	
max. Earth dist.	-299 Jan 12 j 03:42	17° $\overline{3}$ 58'06	31.05158 AU	opposition	-292 Aug 01 j 23:29	4° \approx 35'16	0°-37'-50
retrograde	-299 Apr 27 j 07:04	20° $\overline{3}$ 29'04		min. Earth dist.	-292 Aug 01 j 04:40	4° \approx 36'33	28.98390 AU
opposition	-299 Jul 17 j 05:10	19° $\overline{3}$ 04'43	0°-5'-20	direct	-292 Oct 19 j 08:40	3° \approx 12'22	
min. Earth dist.	-299 Jul 16 j 14:25	19° $\overline{3}$ 05'43	29.04595 AU				
direct	-299 Oct 04 j 02:37	17° $\overline{3}$ 41'43		conjunction	-291 Jan 29 j 02:30	5° \approx 40'03	0°-37'-28
				minimum elong	-291 Jan 29 j 02:30	5° \approx 40'03	0°37'30
conjunction	-298 Jan 13 j 23:39	20° $\overline{3}$ 09'14	0°-7'-13	max. Earth dist.	-291 Jan 29 j 22:30	5° \approx 41'57	30.97871 AU
minimum elong	-298 Jan 13 j 23:39	20° $\overline{3}$ 09'14	0°07'14	retrograde	-291 May 15 j 16:51	8° \approx 13'33	
behind sun begin	-298 Jan 13 j 17:44	20° $\overline{3}$ 08'42		opposition	-291 Aug 04 j 12:25	6° \approx 48'50	0°-42'-20
behind sun end	-298 Jan 14 j 05:34	20° $\overline{3}$ 09'46		min. Earth dist.	-291 Aug 03 j 16:17	6° \approx 50'13	28.97386 AU

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Attention, astronomical year style is used: The year -291 in astronomical counting style is the year 292 BCE in historical counting style.

direct	-291 Oct 21 j 20:47	5°≈25'55		direct	-283 Nov 08 j 13:31	23°≈15'20	
conjunction	-290 Jan 31 j 13:42	7°≈53'37	0°-41'-38	conjunction	-282 Feb 18 j 09:35	25°≈43'21	-1°-12'-16
minimum elong	-290 Jan 31 j 13:42	7°≈53'37	0°41'39	minimum elong	-282 Feb 18 j 09:35	25°≈43'21	1°12'17
max. Earth dist.	-290 Feb 01 j 09:25	7°≈55'29	30.96809 AU	max. Earth dist.	-282 Feb 19 j 09:48	25°≈45'39	30.89655 AU
retrograde	-290 May 18 j 04:47	10°≈27'14		retrograde	-282 Jun 05 j 15:55	28°≈17'49	
min. Earth dist.	-290 Aug 06 j 06:01	9°≈03'46	28.96290 AU	min. Earth dist.	-282 Aug 24 j 06:23	26°≈54'17	28.89488 AU
opposition	-290 Aug 07 j 01:22	9°≈02'26	0°-46'-45	opposition	-282 Aug 25 j 05:58	26°≈52'39	-1°-19'-8
direct	-290 Oct 24 j 07:09	7°≈39'29		direct	-282 Nov 11 j 01:27	25°≈29'35	
conjunction	-289 Feb 03 j 01:03	10°≈07'12	0°-45'-44	conjunction	-281 Feb 20 j 21:37	27°≈57'41	-1°-15'-40
minimum elong	-289 Feb 03 j 01:03	10°≈07'12	0°45'46	minimum elong	-281 Feb 20 j 21:37	27°≈57'41	1°15'42
max. Earth dist.	-289 Feb 03 j 21:53	10°≈09'10	30.95682 AU	max. Earth dist.	-281 Feb 21 j 21:29	27°≈59'56	30.89173 AU
retrograde	-289 May 20 j 17:07	12°≈40'55			-281 Apr 24 j 02:32	0°≈	
opposition	-289 Aug 09 j 14:05	11°≈16'02	0°-51'-6	retrograde	-281 Jun 08 j 05:14	0°≈32'16	
min. Earth dist.	-289 Aug 08 j 17:35	11°≈17'27	28.95138 AU		-281 Jul 24 j 10:40	30°≈	
direct	-289 Oct 26 j 18:33	9°≈53'03		opposition	-281 Aug 27 j 18:34	29°≈07'05	-1°-22'-43
conjunction	-288 Feb 05 j 12:13	12°≈20'46	0°-49'-47	min. Earth dist.	-281 Aug 26 j 19:58	29°≈08'39	28.89017 AU
minimum elong	-288 Feb 05 j 12:13	12°≈20'46	0°49'48	direct	-281 Nov 13 j 12:07	27°≈44'03	
max. Earth dist.	-288 Feb 06 j 08:33	12°≈22'41	30.94523 AU		-280 Feb 18 j 00:40	0°≈	
retrograde	-288 May 22 j 06:08	14°≈54'35		conjunction	-280 Feb 23 j 09:52	0°≈12'13	-1°-18'-58
min. Earth dist.	-288 Aug 10 j 06:36	13°≈31'01	28.94008 AU	minimum elong	-280 Feb 23 j 09:52	0°≈12'13	1°18'59
opposition	-288 Aug 11 j 02:49	13°≈29'37	0°-55'-23	max. Earth dist.	-280 Feb 24 j 10:34	0°≈14'33	30.88682 AU
direct	-288 Oct 28 j 04:34	12°≈06'35		retrograde	-280 Jun 09 j 18:46	2°≈46'53	
conjunction	-287 Feb 06 j 23:38	14°≈34'19	0°-53'-44	min. Earth dist.	-280 Aug 28 j 07:36	1°≈23'20	28.88499 AU
minimum elong	-287 Feb 06 j 23:38	14°≈34'19	0°53'46	opposition	-280 Aug 29 j 06:59	1°≈21'43	-1°-26'-11
max. Earth dist.	-287 Feb 07 j 21:36	14°≈36'24	30.93417 AU		-280 Nov 06 j 04:20	30°≈	
	-287 Feb 18 j 07:40	15°≈		direct	-280 Nov 15 j 00:03	29°≈58'40	
retrograde	-287 May 24 j 18:24	17°≈08'14			-280 Nov 23 j 15:44	0°≈	
opposition	-287 Aug 13 j 15:26	15°≈43'12	0°-59'-35	conjunction	-279 Feb 24 j 22:12	2°≈26'54	-1°-22'-9
min. Earth dist.	-287 Aug 12 j 18:20	15°≈44'39	28.92950 AU	minimum elong	-279 Feb 24 j 22:12	2°≈26'54	1°22'10
	-287 Sep 10 j 00:05	15°≈		max. Earth dist.	-279 Feb 25 j 21:49	2°≈29'08	30.88123 AU
direct	-287 Oct 30 j 16:30	14°≈20'08		retrograde	-279 Jun 12 j 07:29	5°≈01'40	
	-287 Dec 18 j 09:42	15°≈		opposition	-279 Aug 31 j 19:37	3°≈36'28	-1°-29'-31
conjunction	-286 Feb 09 j 10:54	16°≈47'54	0°-57'-37	min. Earth dist.	-279 Aug 30 j 21:08	3°≈38'02	28.87907 AU
minimum elong	-286 Feb 09 j 10:54	16°≈47'54	0°57'38	direct	-279 Nov 17 j 10:14	2°≈13'24	
max. Earth dist.	-286 Feb 10 j 08:25	16°≈49'56	30.92415 AU	conjunction	-278 Feb 27 j 10:48	4°≈41'41	-1°-25'-12
retrograde	-286 May 27 j 08:50	19°≈21'55		minimum elong	-278 Feb 27 j 10:48	4°≈41'41	1°25'13
min. Earth dist.	-286 Aug 15 j 06:23	17°≈58'19	28.92019 AU	max. Earth dist.	-278 Feb 28 j 11:17	4°≈43'59	30.87473 AU
opposition	-286 Aug 16 j 04:04	17°≈56'49	-1°-3'-41	retrograde	-278 Jun 14 j 19:17	7°≈16'29	
direct	-286 Nov 02 j 02:25	16°≈33'43		min. Earth dist.	-278 Sep 02 j 09:28	5°≈52'49	28.87202 AU
conjunction	-285 Feb 11 j 22:32	19°≈01'33	-1°-1'-25	opposition	-278 Sep 03 j 08:05	5°≈51'15	-1°-32'-43
minimum elong	-285 Feb 11 j 22:31	19°≈01'33	1°01'27	direct	-278 Nov 19 j 22:11	4°≈28'08	
max. Earth dist.	-285 Feb 12 j 21:27	19°≈03'43	30.91534 AU	conjunction	-277 Mar 01 j 23:23	6°≈56'27	-1°-28'-8
retrograde	-285 May 29 j 21:13	21°≈35'40		minimum elong	-277 Mar 01 j 23:23	6°≈56'27	1°28'09
opposition	-285 Aug 18 j 16:28	20°≈10'32	-1°-7'-42	max. Earth dist.	-277 Mar 02 j 22:31	6°≈58'38	30.86727 AU
min. Earth dist.	-285 Aug 17 j 18:40	20°≈12'03	28.91209 AU	retrograde	-277 Jun 17 j 09:29	9°≈31'17	
direct	-285 Nov 04 j 13:44	18°≈47'26		opposition	-277 Sep 05 j 20:23	8°≈05'59	-1°-35'-47
conjunction	-284 Feb 14 j 10:05	21°≈15'19	-1°-5'-8	min. Earth dist.	-277 Sep 04 j 22:01	8°≈07'33	28.86430 AU
minimum elong	-284 Feb 14 j 10:05	21°≈15'19	1°05'08	direct	-277 Nov 22 j 08:10	6°≈42'48	
max. Earth dist.	-284 Feb 15 j 09:00	21°≈17'29	30.90797 AU	conjunction	-276 Mar 03 j 12:04	9°≈11'10	-1°-30'-56
retrograde	-284 May 31 j 12:50	23°≈49'33		minimum elong	-276 Mar 03 j 12:04	9°≈11'10	1°30'56
min. Earth dist.	-284 Aug 19 j 06:02	22°≈25'58	28.90541 AU	max. Earth dist.	-276 Mar 04 j 12:01	9°≈13'25	30.85925 AU
opposition	-284 Aug 20 j 04:57	22°≈24'23	-1°-11'-37	retrograde	-276 Jun 18 j 21:29	11°≈46'01	
direct	-284 Nov 06 j 02:00	21°≈01'17		min. Earth dist.	-276 Sep 06 j 10:43	10°≈22'11	28.85626 AU
conjunction	-283 Feb 15 j 21:40	23°≈29'14	-1°-8'-45	opposition	-276 Sep 07 j 08:42	10°≈20'39	-1°-38'-42
minimum elong	-283 Feb 15 j 21:40	23°≈29'14	1°08'46	direct	-276 Nov 23 j 20:09	8°≈57'24	
max. Earth dist.	-283 Feb 16 j 21:24	23°≈31'29	30.90173 AU	conjunction	-275 Mar 06 j 00:34	11°≈25'47	-1°-33'-35
retrograde	-283 Jun 03 j 02:04	26°≈03'35		minimum elong	-275 Mar 06 j 00:33	11°≈25'47	1°33'36
opposition	-283 Aug 22 j 17:36	24°≈38'25	-1°-15'-26	max. Earth dist.	-275 Mar 06 j 23:59	11°≈28'00	30.85141 AU
min. Earth dist.	-283 Aug 21 j 19:13	24°≈39'58	28.89975 AU	retrograde	-275 Jun 21 j 12:25	14°≈00'39	

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Attention, astronomical year style is used: The year -275 in astronomical counting style is the year 276 BCE in historical counting style.

opposition	-275 Sep 09 j 20:55	12° $\mathring{\text{K}}$ 35'13	-1°-41'-28			-267 Oct 18 j 18:40	30° $\mathring{\text{R}}$ $\mathring{\text{K}}$	
min. Earth dist.	-275 Sep 08 j 22:20	12° $\mathring{\text{K}}$ 36'48	28.84873 AU	direct		-267 Dec 14 j 02:38	29° $\mathring{\text{K}}$ 10'52	
direct	-275 Nov 26 j 08:25	11° $\mathring{\text{K}}$ 11'54				-266 Feb 06 j 14:21	0° $\mathring{\text{Y}}$	
conjunction	-274 Mar 08 j 13:19	13° $\mathring{\text{K}}$ 40'20	-1°-36'-6	conjunction	-266 Mar 26 j 22:48	1° $\mathring{\text{Y}}$ 40'02	-1°-50'-41	
minimum elong	-274 Mar 08 j 13:19	13° $\mathring{\text{K}}$ 40'20	1°36'07	minimum elong	-266 Mar 26 j 22:48	1° $\mathring{\text{Y}}$ 40'02	1°50'41	
max. Earth dist.	-274 Mar 09 j 13:11	13° $\mathring{\text{K}}$ 42'35	30.84410 AU	max. Earth dist.	-266 Mar 27 j 20:50	1° $\mathring{\text{Y}}$ 42'07	30.82051 AU	
retrograde	-274 Jun 24 j 00:50	16° $\mathring{\text{K}}$ 15'13		retrograde	-266 Jul 12 j 12:45	4° $\mathring{\text{Y}}$ 15'10		
min. Earth dist.	-274 Sep 11 j 11:19	14° $\mathring{\text{K}}$ 51'16	28.84201 AU	opposition	-266 Sep 30 j 08:34	2° $\mathring{\text{Y}}$ 49'50	-1°-58'-58	
opposition	-274 Sep 12 j 09:01	14° $\mathring{\text{K}}$ 49'45	-1°-44'-4	min. Earth dist.	-266 Sep 29 j 12:03	2° $\mathring{\text{Y}}$ 51'17	28.82032 AU	
direct	-274 Nov 28 j 19:56	13° $\mathring{\text{K}}$ 26'22		direct	-266 Dec 16 j 14:40	1° $\mathring{\text{Y}}$ 26'21		
conjunction	-273 Mar 11 j 02:11	15° $\mathring{\text{K}}$ 54'52	-1°-38'-28	conjunction	-265 Mar 29 j 12:38	3° $\mathring{\text{Y}}$ 55'37	-1°-51'-46	
minimum elong	-273 Mar 11 j 02:11	15° $\mathring{\text{K}}$ 54'52	1°38'29	minimum elong	-265 Mar 29 j 12:38	3° $\mathring{\text{Y}}$ 55'37	1°51'47	
max. Earth dist.	-273 Mar 12 j 02:10	15° $\mathring{\text{K}}$ 57'08	30.83797 AU	max. Earth dist.	-265 Mar 30 j 10:23	3° $\mathring{\text{Y}}$ 57'40	30.81713 AU	
retrograde	-273 Jun 26 j 15:25	18° $\mathring{\text{K}}$ 29'46		retrograde	-265 Jul 15 j 00:56	6° $\mathring{\text{Y}}$ 30'43		
opposition	-273 Sep 14 j 21:02	17° $\mathring{\text{K}}$ 04'16	-1°-46'-32	opposition	-265 Oct 02 j 20:29	5° $\mathring{\text{Y}}$ 05'22	-2°00'-2	
min. Earth dist.	-273 Sep 13 j 22:15	17° $\mathring{\text{K}}$ 05'52	28.83650 AU	min. Earth dist.	-265 Oct 02 j 01:28	5° $\mathring{\text{Y}}$ 06'42	28.81652 AU	
direct	-273 Dec 01 j 08:27	15° $\mathring{\text{K}}$ 40'51		direct	-265 Dec 19 j 01:56	3° $\mathring{\text{Y}}$ 41'50		
conjunction	-272 Mar 12 j 14:53	18° $\mathring{\text{K}}$ 09'25	-1°-40'-41	conjunction	-264 Mar 31 j 02:17	6° $\mathring{\text{Y}}$ 11'09	-1°-52'-41	
minimum elong	-272 Mar 12 j 14:53	18° $\mathring{\text{K}}$ 09'25	1°40'42	minimum elong	-264 Mar 31 j 02:17	6° $\mathring{\text{Y}}$ 11'09	1°52'42	
max. Earth dist.	-272 Mar 13 j 14:32	18° $\mathring{\text{K}}$ 11'39	30.83298 AU	max. Earth dist.	-264 Mar 31 j 23:25	6° $\mathring{\text{Y}}$ 13'08	30.81311 AU	
retrograde	-272 Jun 28 j 05:02	20° $\mathring{\text{K}}$ 44'22		retrograde	-264 Jul 16 j 15:38	8° $\mathring{\text{Y}}$ 46'11		
min. Earth dist.	-272 Sep 15 j 11:14	19° $\mathring{\text{K}}$ 20'23	28.83230 AU	opposition	-264 Oct 04 j 08:10	7° $\mathring{\text{Y}}$ 20'49	-2°00'-56	
opposition	-272 Sep 16 j 09:09	19° $\mathring{\text{K}}$ 18'51	-1°-48'-49	min. Earth dist.	-264 Oct 03 j 12:42	7° $\mathring{\text{Y}}$ 22'11	28.81227 AU	
direct	-272 Dec 02 j 19:36	17° $\mathring{\text{K}}$ 55'26		direct	-264 Dec 20 j 15:16	5° $\mathring{\text{Y}}$ 57'12		
conjunction	-271 Mar 15 j 03:55	20° $\mathring{\text{K}}$ 24'04	-1°-42'-45	conjunction	-263 Apr 02 j 16:02	8° $\mathring{\text{Y}}$ 26'34	-1°-53'-26	
minimum elong	-271 Mar 15 j 03:55	20° $\mathring{\text{K}}$ 24'04	1°42'47	minimum elong	-263 Apr 02 j 16:02	8° $\mathring{\text{Y}}$ 26'34	1°53'27	
max. Earth dist.	-271 Mar 16 j 04:25	20° $\mathring{\text{K}}$ 26'23	30.82949 AU	max. Earth dist.	-263 Apr 03 j 12:18	8° $\mathring{\text{Y}}$ 28'28	30.80877 AU	
retrograde	-271 Jun 30 j 18:53	22° $\mathring{\text{K}}$ 59'03		retrograde	-263 Jul 19 j 05:13	11° $\mathring{\text{Y}}$ 01'32		
opposition	-271 Sep 18 j 21:03	21° $\mathring{\text{K}}$ 33'33	-1°-50'-57	opposition	-263 Oct 06 j 19:49	9° $\mathring{\text{Y}}$ 36'07	-2°-1'-38	
min. Earth dist.	-271 Sep 17 j 22:14	21° $\mathring{\text{K}}$ 35'09	28.82941 AU	min. Earth dist.	-263 Oct 06 j 01:48	9° $\mathring{\text{Y}}$ 37'23	28.80812 AU	
direct	-271 Dec 05 j 07:55	20° $\mathring{\text{K}}$ 10'08		direct	-263 Dec 23 j 03:31	8° $\mathring{\text{Y}}$ 12'25		
conjunction	-270 Mar 17 j 16:54	22° $\mathring{\text{K}}$ 38'52	-1°-44'-40	conjunction	-262 Apr 05 j 05:55	10° $\mathring{\text{Y}}$ 41'51	-1°-54'00	
minimum elong	-270 Mar 17 j 16:54	22° $\mathring{\text{K}}$ 38'52	1°44'41	minimum elong	-262 Apr 05 j 05:55	10° $\mathring{\text{Y}}$ 41'51	1°54'01	
max. Earth dist.	-270 Mar 18 j 16:27	22° $\mathring{\text{K}}$ 41'05	30.82713 AU	max. Earth dist.	-262 Apr 06 j 02:25	10° $\mathring{\text{Y}}$ 43'46	30.80490 AU	
retrograde	-270 Jul 03 j 07:40	25° $\mathring{\text{K}}$ 13'54		retrograde	-262 Jul 21 j 18:38	13° $\mathring{\text{Y}}$ 16'44		
min. Earth dist.	-270 Sep 20 j 11:10	23° $\mathring{\text{K}}$ 49'59	28.82759 AU	opposition	-262 Oct 09 j 07:15	11° $\mathring{\text{Y}}$ 51'17	-2°-2'-9	
opposition	-270 Sep 21 j 09:05	23° $\mathring{\text{K}}$ 48'26	-1°-52'-54	min. Earth dist.	-262 Oct 08 j 12:43	11° $\mathring{\text{Y}}$ 52'36	28.80453 AU	
direct	-270 Dec 07 j 17:59	22° $\mathring{\text{K}}$ 25'01		direct	-262 Dec 25 j 17:11	10° $\mathring{\text{Y}}$ 27'31		
conjunction	-269 Mar 20 j 06:14	24° $\mathring{\text{K}}$ 53'52	-1°-46'-25	conjunction	-261 Apr 07 j 19:39	12° $\mathring{\text{Y}}$ 56'59	-1°-54'-24	
minimum elong	-269 Mar 20 j 06:14	24° $\mathring{\text{K}}$ 53'52	1°46'26	minimum elong	-261 Apr 07 j 19:39	12° $\mathring{\text{Y}}$ 56'59	1°54'24	
max. Earth dist.	-269 Mar 21 j 06:43	24° $\mathring{\text{K}}$ 56'11	30.82560 AU	max. Earth dist.	-261 Apr 08 j 14:54	12° $\mathring{\text{Y}}$ 58'48	30.80174 AU	
retrograde	-269 Jul 05 j 19:51	27° $\mathring{\text{K}}$ 28'56		retrograde	-261 Jul 24 j 07:24	15° $\mathring{\text{Y}}$ 31'48		
opposition	-269 Sep 23 j 20:51	26° $\mathring{\text{K}}$ 03'31	-1°-54'-41	opposition	-261 Oct 11 j 18:41	14° $\mathring{\text{Y}}$ 06'20	-2°-2'-29	
min. Earth dist.	-269 Sep 22 j 22:53	26° $\mathring{\text{K}}$ 05'04	28.82624 AU	min. Earth dist.	-261 Oct 11 j 01:13	14° $\mathring{\text{Y}}$ 07'34	28.80206 AU	
direct	-269 Dec 10 j 05:26	24° $\mathring{\text{K}}$ 40'07		direct	-261 Dec 28 j 03:53	12° $\mathring{\text{Y}}$ 42'29		
conjunction	-268 Mar 21 j 19:34	27° $\mathring{\text{K}}$ 09'05	-1°-48'00	conjunction	-260 Apr 09 j 09:33	15° $\mathring{\text{Y}}$ 12'01	-1°-54'-37	
minimum elong	-268 Mar 21 j 19:33	27° $\mathring{\text{K}}$ 09'05	1°48'01	minimum elong	-260 Apr 09 j 09:33	15° $\mathring{\text{Y}}$ 12'01	1°54'38	
max. Earth dist.	-268 Mar 22 j 18:34	27° $\mathring{\text{K}}$ 11'15	30.82437 AU	max. Earth dist.	-260 Apr 10 j 05:37	15° $\mathring{\text{Y}}$ 13'54	30.79992 AU	
retrograde	-268 Jul 07 j 10:22	29° $\mathring{\text{K}}$ 44'12		retrograde	-260 Jul 25 j 20:12	17° $\mathring{\text{Y}}$ 46'45		
min. Earth dist.	-268 Sep 24 j 11:20	28° $\mathring{\text{K}}$ 20'20	28.82502 AU	opposition	-260 Oct 13 j 06:01	16° $\mathring{\text{Y}}$ 21'17	-2°-2'-38	
opposition	-268 Sep 25 j 08:49	28° $\mathring{\text{K}}$ 18'49	-1°-56'-17	min. Earth dist.	-260 Oct 12 j 12:23	16° $\mathring{\text{Y}}$ 22'32	28.80092 AU	
direct	-268 Dec 11 j 14:51	26° $\mathring{\text{K}}$ 55'25		direct	-260 Dec 29 j 16:27	14° $\mathring{\text{Y}}$ 57'24		
conjunction	-267 Mar 24 j 09:04	29° $\mathring{\text{K}}$ 24'30	-1°-49'-26	conjunction	-259 Apr 11 j 23:14	17° $\mathring{\text{Y}}$ 26'59	-1°-54'-40	
minimum elong	-267 Mar 24 j 09:04	29° $\mathring{\text{K}}$ 24'30	1°49'26	minimum elong	-259 Apr 11 j 23:14	17° $\mathring{\text{Y}}$ 26'59	1°54'41	
max. Earth dist.	-267 Mar 25 j 08:32	29° $\mathring{\text{K}}$ 26'42	30.82281 AU	max. Earth dist.	-259 Apr 12 j 17:54	17° $\mathring{\text{Y}}$ 28'44	30.79962 AU	
	-267 Apr 09 j 05:07	0° $\mathring{\text{Y}}$		retrograde	-259 Jul 28 j 09:27	20° $\mathring{\text{Y}}$ 01'39		
retrograde	-267 Jul 09 j 22:10	1° $\mathring{\text{Y}}$ 59'38		opposition	-259 Oct 15 j 17:24	18° $\mathring{\text{Y}}$ 36'13	-2°-2'-35	
opposition	-267 Sep 27 j 20:47	0° $\mathring{\text{Y}}$ 34'17	-1°-57'-43	min. Earth dist.	-259 Oct 15 j 00:07	18° $\mathring{\text{Y}}$ 37'26	28.80142 AU	
min. Earth dist.	-267 Sep 27 j 00:09	0° $\mathring{\text{Y}}$ 35'45	28.82310 AU	direct	-258 Jan 01 j 02:42	17° $\mathring{\text{Y}}$ 12'16		

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Attention, astronomical year style is used: The year -258 in astronomical counting style is the year 259 BCE in historical counting style.

conjunction	-258 Apr 14 j 13:19	19° Υ 41'57	-1°-54'-33	conjunction	-250 May 03 j 07:37	7° 8 43'54	-1°-47'-15
minimum elong	-258 Apr 14 j 13:19	19° Υ 41'57	1°54'33	minimum elong	-250 May 03 j 07:37	7° 8 43'54	1°47'16
max. Earth dist.	-258 Apr 15 j 08:35	19° Υ 43'45	30.80080 AU	max. Earth dist.	-250 May 03 j 19:14	7° 8 44'59	30.82115 AU
retrograde	-258 Jul 30 j 20:17	22° Υ 16'33		retrograde	-250 Aug 18 j 05:42	10° 8 17'46	
min. Earth dist.	-258 Oct 17 j 11:57	20° Υ 52'20	28.80326 AU	opposition	-250 Nov 04 j 21:38	8° 8 52'45	-1°-53'-49
opposition	-258 Oct 18 j 04:36	20° Υ 51'09	-2°-2'-21	min. Earth dist.	-250 Nov 04 j 11:01	8° 8 53'30	28.82310 AU
direct	-257 Jan 03 j 14:23	19° Υ 27'12		direct	-249 Jan 21 j 14:01	7° 8 28'28	
conjunction	-257 Apr 17 j 03:19	21° Υ 56'58	-1°-54'-14	conjunction	-249 May 05 j 22:04	9° 8 58'56	-1°-45'-36
minimum elong	-257 Apr 17 j 03:19	21° Υ 56'58	1°54'15	minimum elong	-249 May 05 j 22:04	9° 8 58'56	1°45'36
max. Earth dist.	-257 Apr 17 j 21:18	21° Υ 58'39	30.80340 AU	max. Earth dist.	-249 May 06 j 10:01	10° 8 00'03	30.82301 AU
retrograde	-257 Aug 02 j 10:00	24° Υ 31'30		retrograde	-249 Aug 20 j 16:20	12° 8 32'39	
opposition	-257 Oct 20 j 15:50	23° Υ 06'11	-2°-1'-55	opposition	-249 Nov 07 j 08:31	11° 8 07'41	-1°-51'-58
min. Earth dist.	-257 Oct 19 j 23:07	23° Υ 07'22	28.80635 AU	min. Earth dist.	-249 Nov 06 j 22:43	11° 8 08'22	28.82531 AU
direct	-256 Jan 06 j 01:18	21° Υ 42'12		direct	-248 Jan 24 j 02:14	9° 8 43'20	
conjunction	-256 Apr 18 j 17:19	24° Υ 12'05	-1°-53'-45	conjunction	-248 May 07 j 12:09	12° 8 13'52	-1°-43'-47
minimum elong	-256 Apr 18 j 17:19	24° Υ 12'05	1°53'47	minimum elong	-248 May 07 j 12:10	12° 8 13'52	1°43'48
max. Earth dist.	-256 Apr 19 j 11:23	24° Υ 13'46	30.80679 AU	max. Earth dist.	-248 May 07 j 22:33	12° 8 14'50	30.82588 AU
retrograde	-256 Aug 03 j 21:50	26° Υ 46'35		retrograde	-248 Aug 22 j 05:24	14° 8 47'27	
min. Earth dist.	-256 Oct 21 j 11:57	25° Υ 22'24	28.80997 AU	opposition	-248 Nov 08 j 19:18	13° 8 22'30	-1°-49'-56
opposition	-256 Oct 22 j 03:11	25° Υ 21'19	-2°-1'-19	min. Earth dist.	-248 Nov 08 j 09:27	13° 8 23'12	28.82880 AU
direct	-255 Jan 07 j 11:45	23° Υ 57'20		direct	-247 Jan 25 j 13:09	11° 8 58'06	
conjunction	-255 Apr 21 j 07:35	26° Υ 27'20	-1°-53'-6	conjunction	-247 May 10 j 02:32	14° 8 28'42	-1°-41'-48
minimum elong	-255 Apr 21 j 07:36	26° Υ 27'20	1°53'07	minimum elong	-247 May 10 j 02:33	14° 8 28'42	1°41'49
max. Earth dist.	-255 Apr 22 j 00:41	26° Υ 28'56	30.81059 AU	max. Earth dist.	-247 May 10 j 13:03	14° 8 29'40	30.83000 AU
retrograde	-255 Aug 06 j 11:59	29° Υ 01'45			-247 May 24 j 03:52	15° 8	
opposition	-255 Oct 24 j 14:15	27° Υ 36'34	-2°00'-31	retrograde	-247 Aug 24 j 16:04	17° 8 02'09	
min. Earth dist.	-255 Oct 23 j 22:56	27° Υ 37'40	28.81362 AU	opposition	-247 Nov 11 j 06:02	15° 8 37'15	-1°-47'-44
direct	-254 Jan 10 j 00:40	26° Υ 12'34		min. Earth dist.	-247 Nov 10 j 21:35	15° 8 37'51	28.83363 AU
conjunction	-254 Apr 23 j 21:59	28° Υ 42'41	-1°-52'-16		-247 Dec 03 j 20:16	15° R 8	
minimum elong	-254 Apr 23 j 21:59	28° Υ 42'41	1°52'17	direct	-246 Jan 27 j 23:07	14° 8 12'48	
max. Earth dist.	-254 Apr 24 j 13:51	28° Υ 44'10	30.81391 AU		-246 Mar 22 j 22:54	15° 8	
	-254 May 29 j 21:17	0° 8		conjunction	-246 May 12 j 16:54	16° 8 43'29	-1°-39'-40
retrograde	-254 Aug 09 j 01:00	1° 8 17'02		minimum elong	-246 May 12 j 16:55	16° 8 43'29	1°39'42
	-254 Oct 22 j 07:12	30° R Υ		max. Earth dist.	-246 May 13 j 02:25	16° 8 44'22	30.83572 AU
opposition	-254 Oct 27 j 01:36	29° Υ 51'54	-1°-59'-32	retrograde	-246 Aug 27 j 04:30	19° 8 16'48	
min. Earth dist.	-254 Oct 26 j 12:08	29° Υ 52'51	28.81661 AU	opposition	-246 Nov 13 j 16:42	17° 8 51'59	-1°-45'-22
direct	-253 Jan 12 j 12:36	28° Υ 27'52		min. Earth dist.	-246 Nov 13 j 07:50	17° 8 52'37	28.84001 AU
	-253 Mar 31 j 00:23	0° 8		direct	-245 Jan 30 j 12:12	16° 8 27'30	
conjunction	-253 Apr 26 j 12:28	0° 8 58'05	-1°-51'-16	conjunction	-245 May 15 j 07:09	18° 8 58'16	-1°-37'-23
minimum elong	-253 Apr 26 j 12:28	0° 8 58'05	1°51'16	minimum elong	-245 May 15 j 07:10	18° 8 58'16	1°37'24
max. Earth dist.	-253 Apr 27 j 03:46	0° 8 59'30	30.81653 AU	max. Earth dist.	-245 May 15 j 16:00	18° 8 59'06	30.84277 AU
retrograde	-253 Aug 11 j 14:33	3° 8 32'20		retrograde	-245 Aug 29 j 16:03	21° 8 31'28	
opposition	-253 Oct 29 j 12:40	2° 8 07'14	-1°-58'-22	opposition	-245 Nov 16 j 03:28	20° 8 06'44	-1°-42'-51
min. Earth dist.	-253 Oct 28 j 23:11	2° 8 08'12	28.81871 AU	min. Earth dist.	-245 Nov 15 j 20:07	20° 8 07'15	28.84772 AU
direct	-252 Jan 15 j 02:18	0° 8 43'10		direct	-244 Feb 01 j 23:23	18° 8 42'15	
conjunction	-252 Apr 28 j 02:48	3° 8 13'27	-1°-50'-5	conjunction	-244 May 16 j 21:33	21° 8 13'07	-1°-34'-57
minimum elong	-252 Apr 28 j 02:48	3° 8 13'27	1°50'07	minimum elong	-244 May 16 j 21:33	21° 8 13'07	1°34'59
max. Earth dist.	-252 Apr 28 j 16:16	3° 8 14'42	30.81833 AU	max. Earth dist.	-244 May 17 j 06:01	21° 8 13'54	30.85117 AU
retrograde	-252 Aug 13 j 03:53	5° 8 47'35		retrograde	-244 Aug 31 j 05:13	23° 8 46'11	
opposition	-252 Oct 30 j 23:50	4° 8 22'31	-1°-57'-2	opposition	-244 Nov 17 j 14:01	22° 8 21'34	-1°-40'-9
min. Earth dist.	-252 Oct 30 j 11:56	4° 8 23'22	28.82029 AU	min. Earth dist.	-244 Nov 17 j 06:32	22° 8 22'06	28.85637 AU
direct	-251 Jan 16 j 13:28	2° 8 58'23		direct	-243 Feb 03 j 12:19	20° 8 57'04	
conjunction	-251 Apr 30 j 17:15	5° 8 28'44	-1°-48'-45	conjunction	-243 May 19 j 11:55	23° 8 28'02	-1°-32'-22
minimum elong	-251 Apr 30 j 17:15	5° 8 28'44	1°48'46	minimum elong	-243 May 19 j 11:56	23° 8 28'03	1°32'22
max. Earth dist.	-251 May 01 j 06:53	5° 8 30'00	30.81977 AU	max. Earth dist.	-243 May 19 j 18:45	23° 8 28'41	30.86006 AU
retrograde	-251 Aug 15 j 17:08	8° 8 02'44		retrograde	-243 Sep 02 j 18:32	26° 8 01'00	
opposition	-251 Nov 02 j 10:48	6° 8 37'42	-1°-55'-31	opposition	-243 Nov 20 j 00:46	24° 8 36'28	-1°-37'-19
min. Earth dist.	-251 Nov 01 j 23:20	6° 8 38'31	28.82151 AU	min. Earth dist.	-243 Nov 19 j 18:57	24° 8 36'53	28.86531 AU
direct	-250 Jan 19 j 02:58	5° 8 13'29		direct	-242 Feb 05 j 23:40	23° 8 11'58	

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Attention, astronomical year style is used: The year -242 in astronomical counting style is the year 243 BCE in historical counting style.

conjunction	-242 May 22 j 02:35	25° ♄ 43'02	-1°-29'-38	direct	-234 Feb 24 j 01:55	11° ♂ 07'35	
minimum elong	-242 May 22 j 02:35	25° ♄ 43'02	1°29'39				
max. Earth dist.	-242 May 22 j 09:15	25° ♄ 43'40	30.86884 AU	conjunction	-234 Jun 09 j 21:17	13° ♂ 39'00	-1°-3'-26
retrograde	-242 Sep 05 j 07:44	28° ♄ 15'51		minimum elong	-234 Jun 09 j 21:17	13° ♂ 39'00	1°03'27
opposition	-242 Nov 22 j 11:23	26° ♄ 51'25	-1°-34'-20	max. Earth dist.	-234 Jun 09 j 18:44	13° ♂ 38'46	30.92144 AU
min. Earth dist.	-242 Nov 22 j 06:16	26° ♄ 51'46	28.87367 AU	retrograde	-234 Sep 23 j 04:38	16° ♂ 10'22	
direct	-241 Feb 08 j 13:49	25° ♄ 26'54		opposition	-234 Dec 09 j 23:28	14° ♂ 46'21	-1°-5'-50
				min. Earth dist.	-234 Dec 10 j 01:35	14° ♂ 46'12	28.92617 AU
conjunction	-241 May 24 j 17:05	27° ♄ 58'03	-1°-26'-47	direct	-233 Feb 26 j 13:23	13° ♂ 21'23	
minimum elong	-241 May 24 j 17:05	27° ♄ 58'03	1°26'47				
max. Earth dist.	-241 May 24 j 21:24	27° ♄ 58'27	30.87688 AU	conjunction	-233 Jun 12 j 11:25	15° ♂ 52'53	0°-59'-41
	-241 Jul 26 j 12:41	0° ♂		minimum elong	-233 Jun 12 j 11:25	15° ♂ 52'53	0°59'42
retrograde	-241 Sep 07 j 20:27	0° ♂ 30'42		max. Earth dist.	-233 Jun 12 j 09:06	15° ♂ 52'40	30.93044 AU
	-241 Oct 21 j 17:44	30° ♄		retrograde	-233 Sep 25 j 16:48	18° ♂ 24'05	
opposition	-241 Nov 24 j 22:09	29° ♄ 06'20	-1°-31'-12	opposition	-233 Dec 12 j 09:49	17° ♂ 00'10	-1°-1'-46
min. Earth dist.	-241 Nov 24 j 18:07	29° ♄ 06'37	28.88129 AU	min. Earth dist.	-233 Dec 12 j 12:09	17° ♂ 00'00	28.93568 AU
direct	-240 Feb 11 j 01:26	27° ♄ 41'47		direct	-232 Feb 29 j 03:17	15° ♂ 35'12	
	-240 May 20 j 12:10	0° ♂					
conjunction	-240 May 26 j 07:34	0° ♂ 12'59	-1°-23'-47	conjunction	-232 Jun 14 j 01:15	18° ♂ 06'45	0°-55'-51
minimum elong	-240 May 26 j 07:34	0° ♂ 12'59	1°23'48	minimum elong	-232 Jun 14 j 01:15	18° ♂ 06'45	0°55'52
max. Earth dist.	-240 May 26 j 11:45	0° ♂ 13'22	30.88400 AU	max. Earth dist.	-232 Jun 13 j 21:11	18° ♂ 06'23	30.94062 AU
retrograde	-240 Sep 09 j 07:57	2° ♂ 45'28		retrograde	-232 Sep 27 j 05:13	20° ♂ 37'50	
opposition	-240 Nov 26 j 08:53	1° ♂ 21'09	-1°-27'-56	opposition	-232 Dec 13 j 20:10	19° ♂ 14'01	0°-57'-37
min. Earth dist.	-240 Nov 26 j 06:09	1° ♂ 21'21	28.88782 AU	min. Earth dist.	-232 Dec 13 j 23:14	19° ♂ 13'48	28.94631 AU
	-239 Jan 29 j 05:47	30° ♄		direct	-231 Mar 02 j 14:34	17° ♂ 49'03	
direct	-239 Feb 12 j 14:19	29° ♄ 56'33		conjunction	-231 Jun 16 j 15:26	20° ♂ 20'43	0°-51'-55
	-239 Feb 26 j 19:13	0° ♂		minimum elong	-231 Jun 16 j 15:26	20° ♂ 20'43	0°51'56
				max. Earth dist.	-231 Jun 16 j 11:36	20° ♂ 20'21	30.95155 AU
conjunction	-239 May 28 j 22:02	2° ♂ 27'47	-1°-20'-40	retrograde	-231 Sep 29 j 16:58	22° ♂ 51'38	
minimum elong	-239 May 28 j 22:02	2° ♂ 27'47	1°20'41	opposition	-231 Dec 16 j 06:27	21° ♂ 27'57	0°-53'-23
max. Earth dist.	-239 May 28 j 23:56	2° ♂ 27'58	30.89028 AU	min. Earth dist.	-231 Dec 16 j 10:44	21° ♂ 27'39	28.95727 AU
retrograde	-239 Sep 11 j 21:08	5° ♂ 00'04		direct	-230 Mar 05 j 03:24	20° ♂ 03'01	
opposition	-239 Nov 28 j 19:21	3° ♂ 35'48	-1°-24'-32				
min. Earth dist.	-239 Nov 28 j 17:06	3° ♂ 35'58	28.89372 AU	conjunction	-230 Jun 19 j 05:28	22° ♂ 34'45	0°-47'-55
direct	-238 Feb 15 j 02:03	2° ♂ 11'08		minimum elong	-230 Jun 19 j 05:28	22° ♂ 34'45	0°47'56
				max. Earth dist.	-230 Jun 18 j 23:29	22° ♂ 34'12	30.96256 AU
conjunction	-238 May 31 j 12:35	4° ♂ 42'24	-1°-17'-26	retrograde	-230 Oct 02 j 06:32	25° ♂ 05'32	
minimum elong	-238 May 31 j 12:35	4° ♂ 42'24	1°17'28	opposition	-230 Dec 18 j 16:49	23° ♂ 41'58	0°-49'-4
max. Earth dist.	-238 May 31 j 14:09	4° ♂ 42'33	30.89589 AU	min. Earth dist.	-230 Dec 18 j 21:27	23° ♂ 41'38	28.96808 AU
retrograde	-238 Sep 14 j 07:02	7° ♂ 14'30		direct	-229 Mar 07 j 15:11	22° ♂ 17'01	
opposition	-238 Dec 01 j 05:58	5° ♂ 50'16	-1°-21'-1				
min. Earth dist.	-238 Dec 01 j 05:31	5° ♂ 50'18	28.89915 AU	conjunction	-229 Jun 21 j 19:28	24° ♂ 48'50	0°-43'-51
direct	-237 Feb 17 j 13:07	4° ♂ 25'32		minimum elong	-229 Jun 21 j 19:28	24° ♂ 48'50	0°43'51
				max. Earth dist.	-229 Jun 21 j 13:15	24° ♂ 48'16	30.97295 AU
conjunction	-237 Jun 03 j 02:46	6° ♂ 56'49	-1°-14'-6	retrograde	-229 Oct 04 j 16:19	27° ♂ 19'29	
minimum elong	-237 Jun 03 j 02:46	6° ♂ 56'49	1°14'06	opposition	-229 Dec 21 j 03:20	25° ♂ 56'00	0°-44'-41
max. Earth dist.	-237 Jun 03 j 02:56	6° ♂ 56'50	30.90143 AU	min. Earth dist.	-229 Dec 21 j 09:51	25° ♂ 55'33	28.97804 AU
retrograde	-237 Sep 16 j 18:29	9° ♂ 28'43		direct	-228 Mar 09 j 02:27	24° ♂ 31'03	
opposition	-237 Dec 03 j 16:21	8° ♂ 04'32	-1°-17'-23				
min. Earth dist.	-237 Dec 03 j 15:46	8° ♂ 04'34	28.90471 AU	conjunction	-228 Jun 23 j 09:26	27° ♂ 02'55	0°-39'-43
direct	-236 Feb 20 j 02:08	6° ♂ 39'43		minimum elong	-228 Jun 23 j 09:26	27° ♂ 02'55	0°39'44
				max. Earth dist.	-228 Jun 23 j 01:26	27° ♂ 02'10	30.98250 AU
conjunction	-236 Jun 04 j 17:00	9° ♂ 11'02	-1°-10'-39	retrograde	-228 Oct 06 j 03:38	29° ♂ 33'23	
minimum elong	-236 Jun 04 j 17:01	9° ♂ 11'02	1°10'40	opposition	-228 Dec 22 j 13:35	28° ♂ 09'59	0°-40'-13
max. Earth dist.	-236 Jun 04 j 16:26	9° ♂ 10'59	30.90719 AU	min. Earth dist.	-228 Dec 22 j 20:13	28° ♂ 09'31	28.98701 AU
retrograde	-236 Sep 18 j 04:54	11° ♂ 42'45		direct	-227 Mar 11 j 15:03	26° ♂ 45'00	
opposition	-236 Dec 05 j 02:46	10° ♂ 18'36	-1°-13'-39				
min. Earth dist.	-236 Dec 05 j 03:53	10° ♂ 18'32	28.91086 AU	conjunction	-227 Jun 25 j 23:27	29° ♂ 16'54	0°-35'-31
direct	-235 Feb 21 j 12:56	8° ♂ 53'43		minimum elong	-227 Jun 25 j 23:27	29° ♂ 16'54	0°35'32
				max. Earth dist.	-227 Jun 25 j 14:28	29° ♂ 16'04	30.99090 AU
conjunction	-235 Jun 07 j 07:12	11° ♂ 25'05	-1°-7'-5				
minimum elong	-235 Jun 07 j 07:12	11° ♂ 25'05	1°07'05	retrograde	-227 Jul 15 j 13:16	0° ♂	
max. Earth dist.	-235 Jun 07 j 06:02	11° ♂ 24'59	30.91385 AU		-227 Oct 08 j 14:00	1° ♂ 47'11	
retrograde	-235 Sep 20 j 16:45	13° ♂ 56'37		opposition	-227 Dec 25 j 00:04	0° ♂ 23'51	0°-35'-43
opposition	-235 Dec 07 j 13:05	12° ♂ 32'32	-1°-9'-47	min. Earth dist.	-227 Dec 25 j 08:40	0° ♂ 23'15	28.99494 AU
min. Earth dist.	-235 Dec 07 j 13:56	12° ♂ 32'28	28.91788 AU	direct	-226 Jan 08 j 06:12	30° ♄	
					-226 Mar 14 j 01:18	28° ♂ 58'48	

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Attention, astronomical year style is used: The year -226 in astronomical counting style is the year 227 BCE in historical counting style.

	-226 May 16 j 00:08	0°00'		behind sun end	-219 Jul 14 j 17:08	17°02'06"	
				max. Earth dist.	-219 Jul 13 j 19:38	17°00'09"	31.05920 AU
conjunction	-226 Jun 28 j 13:18	1°03'04.2	0°-31'-17	asc. node	-219 Sep 20 j 22:50	19°09'24"	
minimum elong	-226 Jun 28 j 13:18	1°03'04.2	0°31'18"	retrograde	-219 Oct 26 j 05:29	19°03'02.3	
max. Earth dist.	-226 Jun 28 j 03:19	1°02'29.47	30.99847 AU	opposition	-218 Jan 11 j 09:58	18°07'29"	0°01'26"
retrograde	-226 Oct 11 j 00:32	4°00'04.8		min. Earth dist.	-218 Jan 11 j 22:31	18°06'36"	29.06530 AU
opposition	-226 Dec 27 j 10:19	2°03'37.31	0°-31'-10	direct	-218 Apr 01 j 05:14	16°04'20.9	
min. Earth dist.	-226 Dec 27 j 18:58	2°03'36.55	29.00207 AU				
direct	-225 Mar 16 j 14:09	1°01'12.25		conjunction	-218 Jul 16 j 23:36	19°01'40.8	0°03'39"
				minimum elong	-218 Jul 16 j 23:37	19°01'40.9	0°03'39"
conjunction	-225 Jul 01 j 02:58	3°04'44.19	0°-27'-1	behind sun begin	-218 Jul 16 j 17:05	19°01'33.34	
minimum elong	-225 Jul 01 j 02:58	3°04'44.19	0°27'01"	behind sun end	-218 Jul 17 j 06:08	19°01'44.3	
max. Earth dist.	-225 Jun 30 j 15:28	3°04'31.15	31.00539 AU	max. Earth dist.	-218 Jul 16 j 08:23	19°01'24.44	31.07128 AU
retrograde	-225 Oct 13 j 11:00	6°01'14.13		retrograde	-218 Oct 28 j 15:47	21°04'25.3	
opposition	-225 Dec 29 j 20:39	4°05'50.57	0°-26'-35	opposition	-217 Jan 13 j 20:22	20°02'00.5	0°06'09"
min. Earth dist.	-225 Dec 30 j 06:44	4°05'50.15	29.00899 AU	min. Earth dist.	-217 Jan 14 j 10:33	20°01'19.05	29.07746 AU
direct	-224 Mar 18 j 01:53	3°02'25.47		direct	-217 Apr 03 j 15:10	18°05'54.47	
conjunction	-224 Jul 02 j 16:29	5°05'57.40	0°-22'-42	conjunction	-217 Jul 19 j 12:38	21°02'26.48	0°08'02"
minimum elong	-224 Jul 02 j 16:29	5°05'57.40	0°22'43"	minimum elong	-217 Jul 19 j 12:38	21°02'26.48	0°08'03"
max. Earth dist.	-224 Jul 02 j 05:03	5°05'56.37	31.01233 AU	behind sun begin	-217 Jul 19 j 06:47	21°02'26.17	
retrograde	-224 Oct 14 j 21:33	8°02'27.22		behind sun end	-217 Jul 19 j 18:28	21°02'27.19	
opposition	-224 Dec 31 j 06:54	7°04'04.08	0°-21'-57	max. Earth dist.	-217 Jul 18 j 20:40	21°02'25.20	31.08330 AU
min. Earth dist.	-224 Dec 31 j 17:24	7°04'03.24	29.01591 AU	retrograde	-217 Oct 31 j 02:08	23°05'55.26	
direct	-223 Mar 20 j 15:49	5°03'38.53		opposition	-216 Jan 16 j 06:40	22°03'32.44	0°10'50"
				min. Earth dist.	-216 Jan 16 j 20:47	22°03'31.44	29.08914 AU
conjunction	-223 Jul 05 j 05:53	8°01'10.47	0°-18'-22	direct	-216 Apr 05 j 03:34	21°07'07.27	
minimum elong	-223 Jul 05 j 05:53	8°01'10.47	0°18'22"	max. Earth dist.	-216 Jul 20 j 08:12	23°03'37.54	31.09450 AU
max. Earth dist.	-223 Jul 04 j 16:44	8°01'09.34	31.01952 AU				
retrograde	-223 Oct 17 j 09:09	10°04'40.17		conjunction	-216 Jul 21 j 01:34	23°03'39.30	0°12'24"
opposition	-222 Jan 02 j 17:02	9°01'17.05	0°-17'-18	minimum elong	-216 Jul 21 j 01:33	23°03'39.30	0°12'24"
min. Earth dist.	-222 Jan 03 j 04:06	9°01'16.18	29.02355 AU	behind sun begin	-216 Jul 20 j 21:20	23°03'39.07	
direct	-222 Mar 23 j 03:08	7°05'51.46		behind sun end	-216 Jul 21 j 05:47	23°03'39.52	
				retrograde	-216 Nov 01 j 12:30	26°08'08.00	
conjunction	-222 Jul 07 j 19:17	10°02'23.39	0°-14'-1	opposition	-215 Jan 17 j 17:09	24°04'45.23	0°15'30"
minimum elong	-222 Jul 07 j 19:17	10°02'23.39	0°14'02"	min. Earth dist.	-215 Jan 18 j 08:42	24°04'44.18	29.09995 AU
behind sun begin	-222 Jul 07 j 16:10	10°02'23.23		direct	-215 Apr 07 j 14:26	23°02'20.07	
behind sun end	-222 Jul 07 j 22:25	10°02'23.56					
max. Earth dist.	-222 Jul 07 j 06:42	10°02'22.30	31.02757 AU	conjunction	-215 Jul 23 j 14:35	25°05'52.10	0°16'45"
retrograde	-222 Oct 19 j 20:01	12°05'52.58		minimum elong	-215 Jul 23 j 14:35	25°05'52.10	0°16'45"
opposition	-221 Jan 05 j 03:23	11°02'29.49	0°-12'-38	max. Earth dist.	-215 Jul 22 j 21:04	25°05'50.33	31.10470 AU
min. Earth dist.	-221 Jan 05 j 15:12	11°02'28.59	29.03213 AU	retrograde	-215 Nov 03 j 22:40	28°02'20.32	
direct	-221 Mar 25 j 16:56	10°04'04.28		opposition	-214 Jan 20 j 03:33	26°05'58.00	0°20'09"
				min. Earth dist.	-214 Jan 20 j 19:42	26°05'56.52	29.10952 AU
conjunction	-221 Jul 10 j 08:15	12°03'36.21	0°-9'-39	direct	-214 Apr 10 j 03:32	25°03'32.43	
minimum elong	-221 Jul 10 j 08:15	12°03'36.21	0°09'39"	max. Earth dist.	-214 Jul 25 j 08:03	28°02'02.59	31.11376 AU
behind sun begin	-221 Jul 10 j 02:52	12°03'35.52					
behind sun end	-221 Jul 10 j 13:39	12°03'36.50		conjunction	-214 Jul 26 j 03:24	28°04'04.47	0°21'04"
max. Earth dist.	-221 Jul 09 j 18:07	12°03'35.03	31.03686 AU	minimum elong	-214 Jul 26 j 03:23	28°04'04.46	0°21'04"
retrograde	-221 Oct 22 j 08:25	15°05'05.30			-214 Sep 22 j 23:26	0°00'	
opposition	-220 Jan 07 j 13:34	13°04'42.24	0°-7'-57	retrograde	-214 Nov 06 j 10:16	0°01'33.01	
min. Earth dist.	-220 Jan 08 j 01:04	13°04'41.35	29.04212 AU		-214 Dec 21 j 22:55	30°00'00"	
direct	-220 Mar 27 j 05:27	12°01'17.02		opposition	-213 Jan 22 j 14:03	29°01'10.31	0°24'45"
				min. Earth dist.	-213 Jan 23 j 06:49	29°00'09.21	29.11820 AU
conjunction	-220 Jul 11 j 21:27	14°04'48.57	0°-5'-16	direct	-213 Apr 12 j 14:28	27°04'45.13	
minimum elong	-220 Jul 11 j 21:28	14°04'48.57	0°05'18"		-213 Jul 20 j 21:45	0°00'	
behind sun begin	-220 Jul 11 j 15:06	14°04'48.23					
behind sun end	-220 Jul 12 j 03:50	14°04'49.31		conjunction	-213 Jul 28 j 16:02	0°01'17.16	0°25'22"
max. Earth dist.	-220 Jul 11 j 07:45	14°04'47.41	31.04746 AU	minimum elong	-213 Jul 28 j 16:02	0°01'17.16	0°25'22"
retrograde	-220 Oct 23 j 17:56	17°01'17.57		max. Earth dist.	-213 Jul 27 j 21:07	0°01'15.31	31.12195 AU
opposition	-219 Jan 08 j 23:46	15°05'54.56	0°-3'-15	retrograde	-213 Nov 08 j 20:51	2°01'45.21	
min. Earth dist.	-219 Jan 09 j 12:41	15°05'54.01	29.05330 AU	opposition	-212 Jan 25 j 00:33	1°01'22.53	0°29'20"
direct	-219 Mar 29 j 17:03	14°02'29.35		min. Earth dist.	-212 Jan 25 j 18:22	1°01'21.39	29.12601 AU
					-212 Apr 01 j 22:19	30°00'00"	
conjunction	-219 Jul 14 j 10:34	17°01'01.32	0°00'-50	direct	-212 Apr 14 j 04:34	29°05'57.34	
minimum elong	-219 Jul 14 j 10:33	17°01'01.32	0°00'51"		-212 Apr 26 j 09:37	0°00'	
behind sun begin	-219 Jul 14 j 03:59	17°01'00.57		max. Earth dist.	-212 Jul 29 j 07:50	2°01'27.41	31.12956 AU

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Attention, astronomical year style is used: The year -212 in astronomical counting style is the year 213 BCE in historical counting style.

conjunction	-212 Jul 30 j 04:31	2°♏29'36	0°29'37	conjunction	-204 Aug 17 j 04:43	20°♏04'10	1°01'29
minimum elong	-212 Jul 30 j 04:31	2°♏29'35	0°29'37	minimum elong	-204 Aug 17 j 04:42	20°♏04'10	1°01'29
retrograde	-212 Nov 10 j 08:53	4°♏57'32		retrograde	-204 Nov 27 j 16:55	22°♏31'18	
opposition	-211 Jan 26 j 10:46	3°♏35'06	0°33'51	opposition	-203 Feb 12 j 23:14	21°♏09'19	1°07'36
min. Earth dist.	-211 Jan 27 j 04:27	3°♏33'52	29.13353 AU	min. Earth dist.	-203 Feb 13 j 20:09	21°♏07'52	29.21325 AU
direct	-211 Apr 16 j 17:33	2°♏09'44		direct	-203 May 04 j 15:16	19°♏44'07	
conjunction	-211 Aug 01 j 17:03	4°♏41'45	0°33'49	conjunction	-203 Aug 19 j 16:27	22°♏15'57	1°05'07
minimum elong	-211 Aug 01 j 17:03	4°♏41'45	0°33'50	minimum elong	-203 Aug 19 j 16:27	22°♏15'57	1°05'07
max. Earth dist.	-211 Jul 31 j 20:48	4°♏39'52	31.13696 AU	max. Earth dist.	-203 Aug 18 j 17:00	22°♏13'46	31.21732 AU
retrograde	-211 Nov 12 j 18:06	7°♏09'32		retrograde	-203 Nov 30 j 04:52	24°♏43'00	
opposition	-210 Jan 28 j 21:17	5°♏47'08	0°38'19	opposition	-202 Feb 15 j 10:04	23°♏21'03	1°11'26
min. Earth dist.	-210 Jan 29 j 16:21	5°♏45'48	29.14109 AU	min. Earth dist.	-202 Feb 16 j 06:42	23°♏19'38	29.22228 AU
direct	-210 Apr 19 j 05:50	4°♏21'45		direct	-202 May 07 j 03:41	21°♏55'52	
max. Earth dist.	-210 Aug 03 j 07:58	6°♏51'45	31.14478 AU	max. Earth dist.	-202 Aug 21 j 05:05	24°♏25'32	31.22552 AU
conjunction	-210 Aug 04 j 05:09	6°♏53'42	0°37'58	conjunction	-202 Aug 22 j 04:08	24°♏27'40	1°08'40
minimum elong	-210 Aug 04 j 05:08	6°♏53'42	0°37'58	minimum elong	-202 Aug 22 j 04:08	24°♏27'40	1°08'39
retrograde	-210 Nov 15 j 05:11	9°♏21'22		retrograde	-202 Dec 02 j 14:31	26°♏54'38	
opposition	-209 Jan 31 j 07:41	7°♏58'59	0°42'43	opposition	-201 Feb 17 j 21:05	25°♏32'43	1°15'09
min. Earth dist.	-209 Feb 01 j 01:59	7°♏57'42	29.14929 AU	min. Earth dist.	-201 Feb 18 j 19:09	25°♏31'11	29.22986 AU
direct	-209 Apr 21 j 18:46	6°♏33'35		direct	-201 May 09 j 16:00	24°♏07'32	
conjunction	-209 Aug 06 j 17:18	9°♏05'31	0°42'04	conjunction	-201 Aug 24 j 15:39	26°♏39'16	1°12'06
minimum elong	-209 Aug 06 j 17:17	9°♏05'31	0°42'04	minimum elong	-201 Aug 24 j 15:39	26°♏39'16	1°12'06
max. Earth dist.	-209 Aug 05 j 20:19	9°♏03'35	31.15336 AU	max. Earth dist.	-201 Aug 23 j 15:32	26°♏37'02	31.23246 AU
retrograde	-209 Nov 17 j 15:16	11°♏33'03		retrograde	-201 Dec 05 j 01:57	29°♏06'08	
opposition	-208 Feb 02 j 18:10	10°♏10'43	0°47'03	opposition	-200 Feb 20 j 07:48	27°♏44'14	1°18'46
min. Earth dist.	-208 Feb 03 j 13:32	10°♏09'22	29.15859 AU	min. Earth dist.	-200 Feb 21 j 05:21	27°♏42'44	29.23619 AU
direct	-208 Apr 23 j 05:11	8°♏45'19		direct	-200 May 11 j 05:35	26°♏19'02	
max. Earth dist.	-208 Aug 07 j 08:11	11°♏15'16	31.16325 AU	max. Earth dist.	-200 Aug 25 j 03:00	28°♏48'28	31.23811 AU
conjunction	-208 Aug 08 j 05:16	11°♏17'14	0°46'06	conjunction	-200 Aug 26 j 03:11	28°♏50'43	1°15'25
minimum elong	-208 Aug 08 j 05:16	11°♏17'14	0°46'06	minimum elong	-200 Aug 26 j 03:11	28°♏50'43	1°15'26
retrograde	-208 Nov 19 j 00:22	13°♏44'39			-200 Sep 27 j 08:06	0°♏	
opposition	-207 Feb 04 j 04:36	12°♏22'23	0°51'20	retrograde	-200 Dec 06 j 12:00	1°♏17'29	
min. Earth dist.	-207 Feb 04 j 23:18	12°♏21'05	29.16893 AU		-199 Feb 19 j 02:45	30°♏	
direct	-207 Apr 25 j 17:50	10°♏57'01		opposition	-199 Feb 21 j 18:48	29°♏55'35	1°22'16
conjunction	-207 Aug 10 j 17:13	13°♏28'55	0°50'03	min. Earth dist.	-199 Feb 22 j 17:37	29°♏54'00	29.24146 AU
minimum elong	-207 Aug 10 j 17:13	13°♏28'55	0°50'04	direct	-199 May 13 j 17:16	28°♏30'22	
max. Earth dist.	-207 Aug 09 j 19:29	13°♏26'54	31.17403 AU		-199 Jul 31 j 00:34	0°♏	
retrograde	-207 Sep 23 j 13:14	15°♏		conjunction	-199 Aug 28 j 14:28	1°♏01'59	1°18'38
	-207 Nov 21 j 09:56	15°♏56'15		minimum elong	-199 Aug 28 j 14:28	1°♏01'59	1°18'39
	-206 Jan 21 j 19:34	15°♏		max. Earth dist.	-199 Aug 27 j 14:10	0°♏59'43	31.24300 AU
opposition	-206 Feb 06 j 15:10	14°♏34'04	0°55'31	retrograde	-199 Dec 08 j 20:54	3°♏28'39	
min. Earth dist.	-206 Feb 07 j 10:37	14°♏32'42	29.18021 AU	opposition	-198 Feb 24 j 05:40	2°♏06'44	1°25'39
direct	-206 Apr 28 j 03:48	13°♏08'44		min. Earth dist.	-198 Feb 25 j 03:52	2°♏05'12	29.24606 AU
	-206 Jul 25 j 18:51	15°♏		direct	-198 May 16 j 06:36	0°♏41'31	
max. Earth dist.	-206 Aug 12 j 07:59	15°♏38'40	31.18554 AU	max. Earth dist.	-198 Aug 30 j 00:47	3°♏10'44	31.24748 AU
conjunction	-206 Aug 13 j 05:09	15°♏40'38	0°53'57	conjunction	-198 Aug 31 j 01:35	3°♏13'03	1°21'44
minimum elong	-206 Aug 13 j 05:09	15°♏40'38	0°53'57	minimum elong	-198 Aug 31 j 01:35	3°♏13'03	1°21'45
retrograde	-206 Nov 23 j 19:32	18°♏07'53		retrograde	-198 Dec 11 j 06:16	5°♏39'39	
opposition	-205 Feb 09 j 01:49	16°♏45'47	0°59'38	opposition	-197 Feb 26 j 16:40	4°♏17'43	1°28'54
min. Earth dist.	-205 Feb 09 j 21:26	16°♏44'25	29.19174 AU	min. Earth dist.	-197 Feb 27 j 15:20	4°♏16'10	29.25080 AU
direct	-205 Apr 30 j 15:25	15°♏20'30		direct	-197 May 18 j 16:55	2°♏52'30	
conjunction	-205 Aug 15 j 16:47	17°♏52'23	0°57'46	conjunction	-197 Sep 02 j 12:29	5°♏23'57	1°24'43
minimum elong	-205 Aug 15 j 16:47	17°♏52'23	0°57'46	minimum elong	-197 Sep 02 j 12:29	5°♏23'57	1°24'43
max. Earth dist.	-205 Aug 14 j 18:22	17°♏50'18	31.19695 AU	max. Earth dist.	-197 Sep 01 j 12:40	5°♏21'44	31.25235 AU
retrograde	-205 Nov 26 j 06:53	20°♏19'35		retrograde	-197 Dec 13 j 15:00	7°♏50'29	
opposition	-204 Feb 11 j 12:30	18°♏57'33	1°03'40	opposition	-196 Feb 29 j 03:39	6°♏28'34	1°32'01
min. Earth dist.	-204 Feb 12 j 08:23	18°♏56'10	29.20303 AU	min. Earth dist.	-196 Mar 01 j 02:03	6°♏27'01	29.25594 AU
direct	-204 May 02 j 01:53	17°♏32'18		direct	-196 May 20 j 04:44	5°♏03'21	
max. Earth dist.	-204 Aug 16 j 06:55	20°♏02'09	31.20771 AU	conjunction	-196 Sep 03 j 23:19	7°♏34'44	1°27'35

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Attention, astronomical year style is used: The year -196 in astronomical counting style is the year 197 BCE in historical counting style.

minimum elong	-196 Sep 03 j 23:19	7° \mathring{M} 34'44	1°27'34	opposition	-187 Mar 20 j 08:58	26° \mathring{M} 07'17	1°53'36
max. Earth dist.	-196 Sep 02 j 22:45	7° \mathring{M} 32'27	31.25789 AU	min. Earth dist.	-187 Mar 21 j 07:08	26° \mathring{M} 05'46	29.30542 AU
retrograde	-196 Dec 15 j 01:43	10° \mathring{M} 01'15		direct	-187 Jun 09 j 16:14	24° \mathring{M} 42'28	
opposition	-195 Mar 02 j 14:31	8° \mathring{M} 39'20	1°35'00				
min. Earth dist.	-195 Mar 03 j 12:29	8° \mathring{M} 37'50	29.26207 AU	conjunction	-187 Sep 23 j 22:15	27° \mathring{M} 13'22	1°47'09
direct	-195 May 22 j 15:02	7° \mathring{M} 14'09		minimum elong	-187 Sep 23 j 22:15	27° \mathring{M} 13'22	1°47'09
max. Earth dist.	-195 Sep 05 j 11:03	9° \mathring{M} 43'21	31.26442 AU	max. Earth dist.	-187 Sep 22 j 22:27	27° \mathring{M} 11'08	31.30460 AU
				retrograde	-186 Jan 03 j 21:40	29° \mathring{M} 39'49	
conjunction	-195 Sep 06 j 10:14	9° \mathring{M} 45'30	1°30'18	opposition	-186 Mar 22 j 20:31	28° \mathring{M} 18'02	1°55'14
minimum elong	-195 Sep 06 j 10:14	9° \mathring{M} 45'30	1°30'18	min. Earth dist.	-186 Mar 23 j 18:15	28° \mathring{M} 16'33	29.30619 AU
retrograde	-195 Dec 17 j 11:23	12° \mathring{M} 12'00		direct	-186 Jun 12 j 03:11	26° \mathring{M} 53'13	
opposition	-194 Mar 05 j 01:41	10° \mathring{M} 50'08	1°37'51	max. Earth dist.	-186 Sep 25 j 09:59	29° \mathring{M} 21'54	31.30502 AU
min. Earth dist.	-194 Mar 05 j 23:57	10° \mathring{M} 48'36	29.26900 AU				
direct	-194 May 25 j 03:29	9° \mathring{M} 25'01		conjunction	-186 Sep 26 j 08:18	29° \mathring{M} 23'59	1°48'36
				minimum elong	-186 Sep 26 j 08:18	29° \mathring{M} 23'59	1°48'35
conjunction	-194 Sep 08 j 20:45	11° \mathring{M} 56'20	1°32'54		-186 Oct 12 j 12:32	0° \mathring{M}	
minimum elong	-194 Sep 08 j 20:45	11° \mathring{M} 56'20	1°32'54	retrograde	-185 Jan 06 j 06:09	1° \mathring{M} 50'25	
max. Earth dist.	-194 Sep 07 j 20:47	11° \mathring{M} 54'05	31.27172 AU	opposition	-185 Mar 25 j 08:09	0° \mathring{M} 28'35	1°56'41
retrograde	-194 Dec 19 j 23:08	14° \mathring{M} 22'49		min. Earth dist.	-185 Mar 26 j 06:07	0° \mathring{M} 27'05	29.30647 AU
opposition	-193 Mar 07 j 12:44	13° \mathring{M} 01'00	1°40'33		-185 Apr 12 j 03:01	30° \mathring{R} \mathring{M}	
min. Earth dist.	-193 Mar 08 j 10:00	12° \mathring{M} 59'32	29.27654 AU	direct	-185 Jun 14 j 15:13	29° \mathring{M} 03'45	
direct	-193 May 27 j 14:40	11° \mathring{M} 35'57			-185 Aug 14 j 06:04	0° \mathring{M}	
max. Earth dist.	-193 Sep 10 j 08:32	14° \mathring{M} 05'06	31.27922 AU				
				conjunction	-185 Sep 28 j 18:11	1° \mathring{M} 34'24	1°49'53
conjunction	-193 Sep 11 j 07:29	14° \mathring{M} 07'15	1°35'22	minimum elong	-185 Sep 28 j 18:11	1° \mathring{M} 34'24	1°49'52
minimum elong	-193 Sep 11 j 07:29	14° \mathring{M} 07'15	1°35'22	max. Earth dist.	-185 Sep 27 j 19:20	1° \mathring{M} 32'16	31.30539 AU
retrograde	-193 Dec 22 j 09:04	16° \mathring{M} 33'45		retrograde	-184 Jan 08 j 17:06	4° \mathring{M} 00'49	
opposition	-192 Mar 08 j 23:53	15° \mathring{M} 11'59	1°43'06	opposition	-184 Mar 26 j 19:29	2° \mathring{M} 38'55	1°57'59
min. Earth dist.	-192 Mar 09 j 22:13	15° \mathring{M} 10'27	29.28399 AU	min. Earth dist.	-184 Mar 27 j 16:07	2° \mathring{M} 37'31	29.30709 AU
direct	-192 May 29 j 02:10	13° \mathring{M} 47'00		direct	-184 Jun 16 j 01:53	1° \mathring{M} 14'05	
				max. Earth dist.	-184 Sep 29 j 06:39	3° \mathring{M} 42'38	31.30625 AU
conjunction	-192 Sep 12 j 18:06	16° \mathring{M} 18'16	1°37'42				
minimum elong	-192 Sep 12 j 18:05	16° \mathring{M} 18'16	1°37'42	conjunction	-184 Sep 30 j 04:09	3° \mathring{M} 44'38	1°51'01
max. Earth dist.	-192 Sep 11 j 18:34	16° \mathring{M} 16'04	31.28643 AU	minimum elong	-184 Sep 30 j 04:09	3° \mathring{M} 44'38	1°51'00
retrograde	-192 Dec 23 j 21:05	18° \mathring{M} 44'46		retrograde	-183 Jan 10 j 02:44	6° \mathring{M} 11'04	
opposition	-191 Mar 11 j 11:06	17° \mathring{M} 23'03	1°45'31	opposition	-183 Mar 29 j 07:12	4° \mathring{M} 49'08	1°59'06
min. Earth dist.	-191 Mar 12 j 08:31	17° \mathring{M} 21'34	29.29079 AU	min. Earth dist.	-183 Mar 30 j 04:14	4° \mathring{M} 47'42	29.30843 AU
direct	-191 May 31 j 15:51	15° \mathring{M} 58'08		direct	-183 Jun 18 j 13:38	3° \mathring{M} 24'19	
max. Earth dist.	-191 Sep 14 j 05:25	18° \mathring{M} 27'11	31.29259 AU				
				conjunction	-183 Oct 02 j 13:49	5° \mathring{M} 54'47	1°51'59
conjunction	-191 Sep 15 j 04:41	18° \mathring{M} 29'22	1°39'53	minimum elong	-183 Oct 02 j 13:49	5° \mathring{M} 54'47	1°51'59
minimum elong	-191 Sep 15 j 04:41	18° \mathring{M} 29'22	1°39'53	max. Earth dist.	-183 Oct 01 j 16:35	5° \mathring{M} 52'47	31.30813 AU
retrograde	-191 Dec 26 j 07:56	20° \mathring{M} 55'53		retrograde	-182 Jan 12 j 14:18	8° \mathring{M} 21'13	
opposition	-190 Mar 13 j 22:35	19° \mathring{M} 34'10	1°47'46	opposition	-182 Mar 31 j 18:49	6° \mathring{M} 59'16	2°00'04
min. Earth dist.	-190 Mar 14 j 21:00	19° \mathring{M} 32'38	29.29651 AU	min. Earth dist.	-182 Apr 01 j 14:08	6° \mathring{M} 57'57	29.31076 AU
direct	-190 Jun 03 j 03:41	18° \mathring{M} 09'18		direct	-182 Jun 21 j 02:47	5° \mathring{M} 34'31	
conjunction	-190 Sep 17 j 15:13	20° \mathring{M} 40'29	1°41'55	conjunction	-182 Oct 04 j 23:34	8° \mathring{M} 04'54	1°52'47
minimum elong	-190 Sep 17 j 15:13	20° \mathring{M} 40'29	1°41'55	minimum elong	-182 Oct 04 j 23:34	8° \mathring{M} 04'54	1°52'48
max. Earth dist.	-190 Sep 16 j 16:03	20° \mathring{M} 38'19	31.29766 AU	max. Earth dist.	-182 Oct 04 j 03:12	8° \mathring{M} 03'00	31.31091 AU
retrograde	-190 Dec 28 j 16:58	23° \mathring{M} 06'59		retrograde	-181 Jan 15 j 01:11	10° \mathring{M} 31'24	
opposition	-189 Mar 16 j 10:01	21° \mathring{M} 45'18	1°49'53	opposition	-181 Apr 03 j 06:33	9° \mathring{M} 09'27	2°00'50
min. Earth dist.	-189 Mar 17 j 07:42	21° \mathring{M} 43'48	29.30087 AU	min. Earth dist.	-181 Apr 04 j 02:10	9° \mathring{M} 08'07	29.31402 AU
direct	-189 Jun 05 j 16:50	20° \mathring{M} 20'28		direct	-181 Jun 23 j 13:53	7° \mathring{M} 44'47	
max. Earth dist.	-189 Sep 19 j 01:48	22° \mathring{M} 49'20	31.30126 AU				
				conjunction	-181 Oct 07 j 09:12	10° \mathring{M} 15'06	1°53'26
conjunction	-189 Sep 20 j 01:35	22° \mathring{M} 51'34	1°43'49	minimum elong	-181 Oct 07 j 09:12	10° \mathring{M} 15'06	1°53'27
minimum elong	-189 Sep 20 j 01:35	22° \mathring{M} 51'34	1°43'49	max. Earth dist.	-181 Oct 06 j 13:44	10° \mathring{M} 13'17	31.31445 AU
retrograde	-189 Dec 31 j 02:45	25° \mathring{M} 18'03		retrograde	-180 Jan 17 j 10:43	12° \mathring{M} 41'39	
opposition	-188 Mar 17 j 21:31	23° \mathring{M} 56'21	1°51'49	opposition	-180 Apr 04 j 18:15	11° \mathring{M} 19'44	2°01'27
min. Earth dist.	-188 Mar 18 j 19:43	23° \mathring{M} 54'50	29.30387 AU	min. Earth dist.	-180 Apr 05 j 12:38	11° \mathring{M} 18'29	29.31753 AU
direct	-188 Jun 07 j 03:45	22° \mathring{M} 31'32		direct	-180 Jun 25 j 02:45	9° \mathring{M} 55'08	
conjunction	-188 Sep 21 j 12:02	25° \mathring{M} 02'33	1°45'33	conjunction	-180 Oct 08 j 18:49	12° \mathring{M} 25'25	1°53'56
minimum elong	-188 Sep 21 j 12:02	25° \mathring{M} 02'33	1°45'33	minimum elong	-180 Oct 08 j 18:49	12° \mathring{M} 25'25	1°53'55
max. Earth dist.	-188 Sep 20 j 13:03	25° \mathring{M} 00'24	31.30353 AU	max. Earth dist.	-180 Oct 07 j 23:11	12° \mathring{M} 23'35	31.31791 AU
retrograde	-187 Jan 01 j 11:24	27° \mathring{M} 29'01		retrograde	-179 Jan 18 j 21:20	14° \mathring{M} 52'03	

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Attention, astronomical year style is used: The year -179 in astronomical counting style is the year 180 BCE in historical counting style.

opposition	-179 Apr 07 j 06:05	13°♂30'08	2°01'53	opposition	-171 Apr 25 j 07:11	0°♂54'57	1°59'07
min. Earth dist.	-179 Apr 08 j 00:29	13°♂28'53	29.32092 AU	min. Earth dist.	-171 Apr 25 j 21:17	0°♂54'00	29.31175 AU
direct	-179 Jun 27 j 13:35	12°♂05'38			-171 Jun 01 j 03:54	30°♂♂	
max. Earth dist.	-179 Oct 10 j 10:16	14°♂34'09	31.32100 AU	direct	-171 Jul 15 j 11:10	29°♂30'47	
					-171 Aug 27 j 06:14	0°♂	
conjunction	-179 Oct 11 j 04:33	14°♂35'52	1°54'15	conjunction	-171 Oct 28 j 07:57	2°♂00'17	1°51'00
minimum elong	-179 Oct 11 j 04:33	14°♂35'52	1°54'15	minimum elong	-171 Oct 28 j 07:58	2°♂00'17	1°51'00
retrograde	-178 Jan 21 j 06:41	17°♂02'34		max. Earth dist.	-171 Oct 27 j 17:13	1°♂58'53	31.30927 AU
opposition	-178 Apr 09 j 18:08	15°♂40'41	2°02'08	retrograde	-170 Feb 07 j 20:11	4°♂27'32	
min. Earth dist.	-178 Apr 10 j 12:08	15°♂39'27	29.32354 AU	opposition	-170 Apr 27 j 19:33	3°♂05'19	1°58'00
direct	-178 Jun 30 j 01:57	14°♂16'16		min. Earth dist.	-170 Apr 28 j 09:00	3°♂04'24	29.30954 AU
				direct	-170 Jul 17 j 22:48	1°♂41'11	
conjunction	-178 Oct 13 j 14:01	16°♂46'25	1°54'24	conjunction	-170 Oct 30 j 17:06	4°♂10'36	1°49'53
minimum elong	-178 Oct 13 j 14:01	16°♂46'25	1°54'24	minimum elong	-170 Oct 30 j 17:06	4°♂10'36	1°49'52
max. Earth dist.	-178 Oct 12 j 19:09	16°♂44'39	31.32316 AU	max. Earth dist.	-170 Oct 30 j 04:19	4°♂09'24	31.30752 AU
retrograde	-177 Jan 23 j 17:37	19°♂13'13		retrograde	-169 Feb 10 j 05:42	6°♂37'58	
opposition	-177 Apr 12 j 06:10	17°♂51'20	2°02'13	opposition	-169 Apr 30 j 07:53	5°♂15'42	1°56'43
min. Earth dist.	-177 Apr 12 j 23:32	17°♂50'09	29.32519 AU	min. Earth dist.	-169 Apr 30 j 20:24	5°♂14'52	29.30804 AU
direct	-177 Jul 02 j 12:26	16°♂26'59		direct	-169 Jul 20 j 11:43	3°♂51'39	
conjunction	-177 Oct 15 j 23:47	18°♂57'04	1°54'24	conjunction	-169 Nov 02 j 02:10	6°♂20'59	1°48'35
minimum elong	-177 Oct 15 j 23:47	18°♂57'04	1°54'24	minimum elong	-169 Nov 02 j 02:11	6°♂20'59	1°48'35
max. Earth dist.	-177 Oct 15 j 06:16	18°♂55'26	31.32407 AU	max. Earth dist.	-169 Nov 01 j 13:17	6°♂19'46	31.30642 AU
retrograde	-176 Jan 26 j 02:37	21°♂23'57		retrograde	-168 Feb 12 j 16:23	8°♂48'27	
opposition	-176 Apr 13 j 18:11	20°♂02'03	2°02'08	opposition	-168 May 01 j 20:05	7°♂26'11	1°55'15
min. Earth dist.	-176 Apr 14 j 11:56	20°♂00'51	29.32535 AU	min. Earth dist.	-168 May 02 j 07:28	7°♂25'25	29.30714 AU
direct	-176 Jul 03 j 23:49	18°♂37'45		direct	-168 Jul 21 j 22:03	6°♂02'12	
conjunction	-176 Oct 17 j 09:21	21°♂07'46	1°54'14	conjunction	-168 Nov 03 j 11:26	8°♂31'28	1°47'09
minimum elong	-176 Oct 17 j 09:21	21°♂07'46	1°54'14	minimum elong	-168 Nov 03 j 11:26	8°♂31'28	1°47'09
max. Earth dist.	-176 Oct 16 j 15:10	21°♂06'03	31.32360 AU	max. Earth dist.	-168 Nov 03 j 00:25	8°♂30'26	31.30559 AU
retrograde	-175 Jan 27 j 14:09	23°♂34'43		retrograde	-167 Feb 14 j 01:18	10°♂59'04	
opposition	-175 Apr 16 j 06:18	22°♂12'47	2°01'52	opposition	-167 May 04 j 08:41	9°♂36'47	1°53'38
min. Earth dist.	-175 Apr 16 j 22:47	22°♂11'40	29.32415 AU	min. Earth dist.	-167 May 04 j 19:55	9°♂36'02	29.30620 AU
direct	-175 Jul 06 j 10:03	20°♂48'31		direct	-167 Jul 24 j 09:33	8°♂12'53	
conjunction	-175 Oct 19 j 18:53	23°♂18'27	1°53'54	conjunction	-167 Nov 05 j 20:27	10°♂42'05	1°45'33
minimum elong	-175 Oct 19 j 18:54	23°♂18'27	1°53'55	minimum elong	-167 Nov 05 j 20:27	10°♂42'05	1°45'33
max. Earth dist.	-175 Oct 19 j 01:47	23°♂16'50	31.32169 AU	max. Earth dist.	-167 Nov 05 j 09:22	10°♂41'02	31.30461 AU
retrograde	-174 Jan 30 j 00:17	25°♂45'28		retrograde	-166 Feb 16 j 13:14	13°♂09'48	
opposition	-174 Apr 18 j 18:40	24°♂23'29	2°01'26	opposition	-166 May 06 j 21:14	11°♂47'31	1°51'50
min. Earth dist.	-174 Apr 19 j 11:45	24°♂22'19	29.32166 AU	min. Earth dist.	-166 May 07 j 06:50	11°♂46'52	29.30490 AU
direct	-174 Jul 08 j 21:48	22°♂59'15		direct	-166 Jul 26 j 19:48	10°♂23'41	
max. Earth dist.	-174 Oct 21 j 11:25	25°♂27'28	31.31883 AU				
conjunction	-174 Oct 22 j 04:18	25°♂29'03	1°53'25	conjunction	-166 Nov 08 j 05:44	12°♂52'48	1°43'48
minimum elong	-174 Oct 22 j 04:18	25°♂29'03	1°53'26	minimum elong	-166 Nov 08 j 05:44	12°♂52'48	1°43'48
retrograde	-173 Feb 01 j 12:12	27°♂56'07		max. Earth dist.	-166 Nov 07 j 19:50	12°♂51'52	31.30285 AU
opposition	-173 Apr 21 j 06:42	26°♂34'04	2°00'50		-165 Jan 14 j 19:08	15°♂	
min. Earth dist.	-173 Apr 21 j 22:15	26°♂33'01	29.31839 AU	retrograde	-165 Feb 18 j 23:39	15°♂20'40	
direct	-173 Jul 11 j 10:46	25°♂09'51			-165 Mar 27 j 09:37	15°♂♂	
conjunction	-173 Oct 24 j 13:36	27°♂39'33	1°52'46	opposition	-165 May 09 j 09:51	13°♂58'20	1°49'53
minimum elong	-173 Oct 24 j 13:36	27°♂39'33	1°52'46	min. Earth dist.	-165 May 09 j 19:57	13°♂57'39	29.30266 AU
max. Earth dist.	-173 Oct 23 j 21:24	27°♂38'02	31.31533 AU	direct	-165 Jul 29 j 06:46	12°♂34'35	
	-172 Jan 15 j 01:14	0°♂			-165 Nov 09 j 00:35	15°♂	
retrograde	-172 Feb 03 j 23:22	0°♂06'41		conjunction	-165 Nov 10 j 15:00	15°♂03'38	1°41'54
	-172 Feb 24 j 02:09	30°♂♂		minimum elong	-165 Nov 10 j 15:00	15°♂03'38	1°41'53
opposition	-172 Apr 22 j 18:59	28°♂44'33	2°00'03	max. Earth dist.	-165 Nov 10 j 05:27	15°♂02'44	31.30008 AU
min. Earth dist.	-172 Apr 23 j 10:45	28°♂43'29	29.31491 AU	retrograde	-164 Feb 21 j 11:48	17°♂31'36	
direct	-172 Jul 12 j 21:51	27°♂20'21		opposition	-164 May 10 j 22:28	16°♂09'15	1°47'46
conjunction	-172 Oct 25 j 22:49	29°♂49'57	1°51'58	min. Earth dist.	-164 May 11 j 07:02	16°♂08'40	29.29907 AU
minimum elong	-172 Oct 25 j 22:49	29°♂49'57	1°51'57		-164 Jun 30 j 06:00	15°♂♂	
max. Earth dist.	-172 Oct 25 j 07:54	29°♂48'33	31.31201 AU	direct	-164 Jul 30 j 18:36	14°♂45'32	
	-172 Oct 30 j 09:38	0°♂			-164 Aug 29 j 14:36	15°♂	
retrograde	-171 Feb 05 j 08:50	2°♂17'08					

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Attention, astronomical year style is used: The year -164 in astronomical counting style is the year 165 BCE in historical counting style.

conjunction	-164 Nov 12 j 00:14	17° M 14'31	1°39'51	conjunction	-156 Nov 29 j 01:06	4° ° 40'35	1°18'39
minimum elong	-164 Nov 12 j 00:14	17° M 14'31	1°39'50	minimum elong	-156 Nov 29 j 01:06	4° ° 40'35	1°18'39
max. Earth dist.	-164 Nov 11 j 15:01	17° M 13'38	31.29571 AU	max. Earth dist.	-156 Nov 28 j 23:19	4° ° 40'25	31.23800 AU
retrograde	-163 Feb 22 j 23:34	19° M 42'37		retrograde	-155 Mar 12 j 15:17	7° ° 09'42	
opposition	-163 May 13 j 11:19	18° M 20'11	1°45'31	opposition	-155 May 31 j 17:25	5° ° 46'45	1°22'19
min. Earth dist.	-163 May 13 j 20:17	18° M 19'35	29.29396 AU	min. Earth dist.	-155 May 31 j 18:01	5° ° 46'43	29.23570 AU
direct	-163 Aug 02 j 04:59	16° M 56'31		direct	-155 Aug 20 j 02:08	4° ° 23'20	
conjunction	-163 Nov 14 j 09:35	19° M 25'24	1°37'39	conjunction	-155 Dec 01 j 10:13	6° ° 51'38	1°15'26
minimum elong	-163 Nov 14 j 09:35	19° M 25'24	1°37'39	minimum elong	-155 Dec 01 j 10:13	6° ° 51'38	1°15'26
max. Earth dist.	-163 Nov 14 j 01:26	19° M 24'38	31.28992 AU	max. Earth dist.	-155 Dec 01 j 09:06	6° ° 51'32	31.23239 AU
retrograde	-162 Feb 25 j 10:20	21° M 53'36		retrograde	-154 Mar 15 j 03:40	9° ° 20'56	
opposition	-162 May 16 j 00:05	20° M 31'07	1°43'06	opposition	-154 Jun 03 j 06:24	7° ° 57'57	1°18'50
min. Earth dist.	-162 May 16 j 07:41	20° M 30'36	29.28730 AU	min. Earth dist.	-154 Jun 03 j 07:04	7° ° 57'55	29.23012 AU
direct	-162 Aug 04 j 18:28	19° M 07'28		direct	-154 Aug 22 j 11:06	6° ° 34'37	
conjunction	-162 Nov 16 j 18:42	21° M 36'15	1°35'20	conjunction	-154 Dec 03 j 19:26	9° ° 02'52	1°12'07
minimum elong	-162 Nov 16 j 18:42	21° M 36'15	1°35'20	minimum elong	-154 Dec 03 j 19:26	9° ° 02'52	1°12'06
max. Earth dist.	-162 Nov 16 j 10:18	21° M 35'28	31.28266 AU	max. Earth dist.	-154 Dec 03 j 19:50	9° ° 02'55	31.22672 AU
retrograde	-161 Feb 27 j 22:37	24° M 04'34		retrograde	-153 Mar 17 j 15:28	11° ° 32'21	
opposition	-161 May 18 j 12:51	22° M 41'59	1°40'33	opposition	-153 Jun 05 j 19:18	10° ° 09'20	1°15'13
min. Earth dist.	-161 May 18 j 20:13	22° M 41'29	29.27948 AU	min. Earth dist.	-153 Jun 05 j 18:26	10° ° 09'24	29.22404 AU
direct	-161 Aug 07 j 06:11	21° M 18'20		direct	-153 Aug 25 j 00:09	8° ° 46'03	
conjunction	-161 Nov 19 j 03:56	23° M 47'02	1°32'52	conjunction	-153 Dec 06 j 04:39	11° ° 14'17	1°08'41
minimum elong	-161 Nov 19 j 03:56	23° M 47'02	1°32'51	minimum elong	-153 Dec 06 j 04:39	11° ° 14'17	1°08'40
max. Earth dist.	-161 Nov 18 j 21:17	23° M 46'24	31.27443 AU	max. Earth dist.	-153 Dec 06 j 04:48	11° ° 14'18	31.22030 AU
retrograde	-160 Mar 01 j 08:23	26° M 15'26		retrograde	-152 Mar 19 j 05:27	13° ° 43'55	
opposition	-160 May 20 j 01:30	24° M 52'46	1°37'51	opposition	-152 Jun 07 j 08:17	12° ° 20'52	1°11'30
min. Earth dist.	-160 May 20 j 08:04	24° M 52'19	29.27087 AU	min. Earth dist.	-152 Jun 07 j 07:08	12° ° 20'57	29.21719 AU
direct	-160 Aug 08 j 19:29	23° M 29'07		direct	-152 Aug 26 j 11:13	10° ° 57'39	
conjunction	-160 Nov 20 j 12:58	25° M 57'43	1°30'17	conjunction	-152 Dec 07 j 14:08	13° ° 25'50	1°05'09
minimum elong	-160 Nov 20 j 12:58	25° M 57'43	1°30'16	minimum elong	-152 Dec 07 j 14:09	13° ° 25'50	1°05'09
max. Earth dist.	-160 Nov 20 j 06:16	25° M 57'05	31.26588 AU	max. Earth dist.	-152 Dec 07 j 15:59	13° ° 26'01	31.21290 AU
retrograde	-159 Mar 03 j 19:32	28° M 26'13		retrograde	-151 Mar 21 j 16:21	15° ° 55'38	
opposition	-159 May 22 j 14:17	27° M 03'28	1°35'01	opposition	-151 Jun 09 j 21:26	14° ° 32'31	1°07'41
min. Earth dist.	-159 May 22 j 19:31	27° M 03'07	29.26246 AU	min. Earth dist.	-151 Jun 09 j 19:34	14° ° 32'39	29.20907 AU
direct	-159 Aug 11 j 06:24	25° M 39'50		direct	-151 Aug 29 j 00:00	13° ° 09'20	
conjunction	-159 Nov 22 j 21:59	28° M 08'21	1°27'33	conjunction	-151 Dec 09 j 23:26	15° ° 37'28	1°01'32
minimum elong	-159 Nov 22 j 21:59	28° M 08'21	1°27'33	minimum elong	-151 Dec 09 j 23:26	15° ° 37'28	1°01'32
max. Earth dist.	-159 Nov 22 j 17:22	28° M 07'54	31.25767 AU	max. Earth dist.	-151 Dec 10 j 00:56	15° ° 37'36	31.20423 AU
retrograde	-158 Jan 17 j 13:21	0° °		retrograde	-150 Mar 24 j 04:41	18° ° 07'24	
opposition	-158 Mar 06 j 04:34	0° ° 36'59		opposition	-150 Jun 12 j 10:34	16° ° 44'13	1°03'45
min. Earth dist.	-158 Apr 25 j 03:13	30° °		min. Earth dist.	-150 Jun 12 j 07:47	16° ° 44'24	29.19971 AU
direct	-158 May 25 j 03:09	29° M 14'09	1°32'02	direct	-150 Aug 31 j 11:22	15° ° 21'02	
conjunction	-158 May 25 j 07:51	29° M 13'50	29.25457 AU	conjunction	-150 Dec 12 j 09:01	17° ° 49'06	0°57'49
direct	-158 Aug 13 j 18:24	27° M 50'33		minimum elong	-150 Dec 12 j 09:02	17° ° 49'06	0°57'49
conjunction	-158 Nov 16 j 21:51	0° °		max. Earth dist.	-150 Dec 12 j 11:59	17° ° 49'22	31.19416 AU
minimum elong	-158 Nov 25 j 07:00	0° ° 18'59	1°24'43	retrograde	-149 Mar 26 j 14:41	20° ° 19'09	
max. Earth dist.	-158 Nov 25 j 07:00	0° ° 18'59	1°24'43	opposition	-149 Jun 14 j 23:33	18° ° 55'52	0°59'45
retrograde	-158 Nov 25 j 02:43	0° ° 18'35	31.25035 AU	min. Earth dist.	-149 Jun 14 j 20:46	18° ° 56'03	29.18899 AU
opposition	-157 Mar 08 j 16:32	2° ° 47'46		direct	-149 Sep 03 j 00:23	17° ° 32'41	
min. Earth dist.	-157 May 27 j 15:43	1° ° 24'53	1°28'56	conjunction	-149 Dec 14 j 18:26	20° ° 00'39	0°54'02
direct	-157 May 27 j 18:23	1° ° 24'42	29.24764 AU	minimum elong	-149 Dec 14 j 18:26	20° ° 00'39	0°54'02
conjunction	-157 Aug 16 j 04:43	0° ° 01'20		max. Earth dist.	-149 Dec 14 j 21:27	20° ° 00'56	31.18312 AU
minimum elong	-157 Nov 27 j 16:07	2° ° 29'42	1°21'44	retrograde	-148 Mar 28 j 03:09	22° ° 30'49	
max. Earth dist.	-157 Nov 27 j 16:07	2° ° 29'43	1°21'44	opposition	-148 Jun 16 j 12:31	21° ° 07'26	0°55'39
retrograde	-157 Nov 27 j 13:16	2° ° 29'26	31.24380 AU	min. Earth dist.	-148 Jun 16 j 08:03	21° ° 07'44	29.17756 AU
opposition	-156 Mar 10 j 02:59	4° ° 58'39		direct	-148 Sep 04 j 11:57	19° ° 44'13	
min. Earth dist.	-156 May 29 j 04:36	3° ° 35'44	1°25'41	conjunction	-148 Dec 16 j 03:44	22° ° 12'06	0°50'10
direct	-156 May 29 j 07:14	3° ° 35'34	29.24143 AU	minimum elong	-148 Dec 16 j 03:44	22° ° 12'06	0°50'09
conjunction	-156 Aug 17 j 15:19	2° ° 12'15		max. Earth dist.	-148 Dec 16 j 07:57	22° ° 12'30	31.17149 AU

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Attention, astronomical year style is used: The year -147 in astronomical counting style is the year 148 BCE in historical counting style.

retrograde	-147 Mar 30 j 12:46	24° 2 42'24		retrograde	-139 Apr 17 j 17:21	12° 3 16'53	
opposition	-147 Jun 19 j 01:40	23° 2 18'53	0°51'29	opposition	-139 Jul 07 j 09:37	10° 3 52'58	0°15'48
min. Earth dist.	-147 Jun 18 j 21:14	23° 2 19'11	29.16600 AU	min. Earth dist.	-139 Jul 06 j 20:52	10° 3 53'50	29.09895 AU
direct	-147 Sep 06 j 23:06	21° 2 55'39		direct	-139 Sep 24 j 16:16	9° 3 30'03	
conjunction	-147 Dec 18 j 13:09	24° 2 23'27	0°46'13	conjunction	-138 Jan 04 j 18:33	11° 3 57'45	0°12'40
minimum elong	-147 Dec 18 j 13:09	24° 2 23'27	0°46'13	minimum elong	-138 Jan 04 j 18:33	11° 3 57'45	0°12'40
max. Earth dist.	-147 Dec 18 j 18:34	24° 2 23'58	31.16026 AU	behind sun begin	-138 Jan 04 j 14:25	11° 3 57'22	
retrograde	-146 Apr 02 j 00:17	26° 2 53'52		behind sun end	-138 Jan 04 j 22:42	11° 3 58'07	
opposition	-146 Jun 21 j 14:31	25° 2 30'15	0°47'14	max. Earth dist.	-138 Jan 05 j 06:53	11° 3 58'54	31.09437 AU
min. Earth dist.	-146 Jun 21 j 07:59	25° 2 30'41	29.15509 AU	retrograde	-138 Apr 20 j 03:56	14° 3 29'34	
direct	-146 Sep 09 j 10:09	24° 2 07'00		opposition	-138 Jul 09 j 22:48	13° 3 05'36	0°11'08
conjunction	-146 Dec 20 j 22:30	26° 2 34'44	0°42'13	min. Earth dist.	-138 Jul 09 j 10:35	13° 3 06'26	29.08976 AU
minimum elong	-146 Dec 20 j 22:30	26° 2 34'45	0°42'13	direct	-138 Sep 27 j 03:11	11° 3 42'42	
max. Earth dist.	-146 Dec 21 j 04:33	26° 2 35'19	31.14977 AU	conjunction	-137 Jan 07 j 04:49	14° 3 10'24	0°08'19
retrograde	-145 Apr 04 j 12:23	29° 2 05'18		minimum elong	-137 Jan 07 j 04:49	14° 3 10'23	0°08'19
opposition	-145 Jun 24 j 03:31	27° 2 41'36	0°42'55	behind sun begin	-137 Jan 06 j 23:09	14° 3 09'53	
min. Earth dist.	-145 Jun 23 j 20:51	27° 2 42'03	29.14518 AU	behind sun end	-137 Jan 07 j 10:29	14° 3 10'54	
direct	-145 Sep 11 j 19:22	26° 2 18'22		max. Earth dist.	-137 Jan 07 j 17:48	14° 3 11'37	31.08461 AU
conjunction	-145 Dec 23 j 08:00	28° 2 46'04	0°38'09	retrograde	-137 Apr 22 j 16:11	16° 3 42'21	
minimum elong	-145 Dec 23 j 08:00	28° 2 46'04	0°38'08	opposition	-137 Jul 12 j 11:52	15° 3 18'20	0°06'28
max. Earth dist.	-145 Dec 23 j 15:53	28° 2 46'48	31.14043 AU	min. Earth dist.	-137 Jul 11 j 22:11	15° 3 19'16	29.07927 AU
retrograde	-144 Jan 26 j 06:39	0° 3		direct	-137 Sep 29 j 14:27	13° 3 55'26	
opposition	-144 Apr 06 j 00:16	1° 3 16'46		conjunction	-136 Jan 09 j 14:56	16° 3 23'06	0°03'58
min. Earth dist.	-144 Jun 21 j 09:10	30° 2 16'46		minimum elong	-136 Jan 09 j 14:56	16° 3 23'06	0°03'57
direct	-144 Jun 25 j 16:21	29° 2 53'01	0°38'32	behind sun begin	-136 Jan 09 j 08:36	16° 3 22'32	
conjunction	-144 Jun 25 j 07:46	29° 2 53'36	29.13629 AU	behind sun end	-136 Jan 09 j 21:16	16° 3 23'41	
retrograde	-144 Sep 13 j 07:49	28° 2 29'49		max. Earth dist.	-136 Jan 10 j 03:52	16° 3 24'19	31.07349 AU
opposition	-144 Nov 28 j 19:04	0° 3		retrograde	-136 Apr 24 j 04:32	18° 3 55'13	
conjunction	-144 Dec 24 j 17:25	0° 3 57'29	0°34'01	min. Earth dist.	-136 Jul 13 j 11:50	17° 3 32'00	29.06775 AU
minimum elong	-144 Dec 24 j 17:25	0° 3 57'29	0°34'01	opposition	-136 Jul 14 j 01:03	17° 3 31'06	0°01'47
max. Earth dist.	-144 Dec 25 j 01:23	0° 3 58'14	31.13213 AU	direct	-136 Sep 30 j 23:54	16° 3 08'11	
retrograde	-143 Apr 08 j 14:33	3° 3 28'22		desc. node	-136 Dec 01 j 07:15	17° 3 08'55	
opposition	-143 Jun 28 j 05:24	2° 3 04'34	0°34'05	conjunction	-135 Jan 11 j 01:17	18° 3 35'49	0°00'-29
min. Earth dist.	-143 Jun 27 j 20:10	2° 3 05'12	29.12851 AU	minimum elong	-135 Jan 11 j 01:15	18° 3 35'49	0°00'31
direct	-143 Sep 15 j 17:44	0° 3 41'25		behind sun begin	-135 Jan 10 j 18:52	18° 3 35'14	
conjunction	-143 Dec 27 j 03:02	3° 3 09'05	0°29'50	behind sun end	-135 Jan 11 j 07:39	18° 3 36'23	
minimum elong	-143 Dec 27 j 03:02	3° 3 09'05	0°29'49	max. Earth dist.	-135 Jan 11 j 15:40	18° 3 37'10	31.06172 AU
max. Earth dist.	-143 Dec 27 j 13:06	3° 3 10'02	31.12471 AU	retrograde	-135 Apr 26 j 16:36	21° 3 08'03	
retrograde	-142 Apr 11 j 02:04	5° 3 40'09		opposition	-135 Jul 16 j 14:04	19° 3 43'50	0°-2'-53
opposition	-142 Jun 30 j 18:26	4° 3 16'19	0°29'35	min. Earth dist.	-135 Jul 15 j 23:23	19° 3 44'51	29.05579 AU
min. Earth dist.	-142 Jun 30 j 08:13	4° 3 17'01	29.12126 AU	direct	-135 Oct 03 j 12:38	18° 3 20'54	
direct	-142 Sep 18 j 05:41	2° 3 53'14		conjunction	-134 Jan 13 j 11:23	20° 3 48'29	0°-4'-55
conjunction	-142 Dec 29 j 12:42	5° 3 20'54	0°25'35	minimum elong	-134 Jan 13 j 11:23	20° 3 48'29	0°04'57
minimum elong	-142 Dec 29 j 12:42	5° 3 20'54	0°25'35	behind sun begin	-134 Jan 13 j 05:08	20° 3 47'55	
max. Earth dist.	-142 Dec 29 j 22:40	5° 3 21'50	31.11771 AU	behind sun end	-134 Jan 13 j 17:38	20° 3 49'03	
retrograde	-141 Apr 13 j 15:49	7° 3 52'09		max. Earth dist.	-134 Jan 14 j 01:33	20° 3 49'49	31.04981 AU
opposition	-141 Jul 03 j 07:19	6° 3 28'18	0°25'01	retrograde	-134 Apr 29 j 06:47	23° 3 20'51	
min. Earth dist.	-141 Jul 02 j 20:06	6° 3 29'03	29.11431 AU	opposition	-134 Jul 19 j 03:08	21° 3 56'32	0°-7'-34
direct	-141 Sep 20 j 16:24	5° 3 05'16		min. Earth dist.	-134 Jul 18 j 12:08	21° 3 57'33	29.04416 AU
conjunction	-141 Dec 31 j 22:35	7° 3 32'57	0°21'19	direct	-134 Oct 05 j 22:18	20° 3 33'33	
minimum elong	-141 Dec 31 j 22:35	7° 3 32'57	0°21'19	conjunction	-133 Jan 15 j 21:48	23° 3 01'08	0°-9'-16
max. Earth dist.	-140 Jan 01 j 10:09	7° 3 34'02	31.11059 AU	minimum elong	-133 Jan 15 j 21:49	23° 3 01'08	0°09'17
retrograde	-140 Apr 15 j 03:33	10° 3 04'24		behind sun begin	-133 Jan 15 j 16:23	23° 3 00'38	
opposition	-140 Jul 04 j 20:29	8° 3 40'31	0°20'26	behind sun end	-133 Jan 16 j 03:14	23° 3 01'37	
min. Earth dist.	-140 Jul 04 j 09:13	8° 3 41'17	29.10697 AU	max. Earth dist.	-133 Jan 16 j 13:53	23° 3 02'39	31.03841 AU
direct	-140 Sep 22 j 04:54	7° 3 17'33		retrograde	-133 May 01 j 18:10	25° 3 33'37	
conjunction	-139 Jan 02 j 08:25	9° 3 45'15	0°17'00	opposition	-133 Jul 21 j 15:55	24° 3 09'13	0°-12'-14
minimum elong	-139 Jan 02 j 08:25	9° 3 45'15	0°17'00	min. Earth dist.	-133 Jul 20 j 23:59	24° 3 10'18	29.03318 AU
max. Earth dist.	-139 Jan 02 j 20:05	9° 3 46'20	31.10302 AU	direct	-133 Oct 08 j 09:57	22° 3 46'13	
conjunction	-132 Jan 18 j 08:07	25° 3 13'47	0°-13'-37				

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Attention, astronomical year style is used: The year -132 in astronomical counting style is the year 133 BCE in historical counting style.

minimum elong	-132 Jan 18 j 08:07	25°☾13'47	0°13'38	conjunction	-124 Feb 04 j 23:24	12°☾59'53	0°-47'-22
behind sun begin	-132 Jan 18 j 04:32	25°☾13'28		minimum elong	-124 Feb 04 j 23:24	12°☾59'53	0°47'24
behind sun end	-132 Jan 18 j 11:42	25°☾14'07		max. Earth dist.	-124 Feb 05 j 20:23	13°☾01'52	30.96173 AU
max. Earth dist.	-132 Jan 19 j 00:08	25°☾15'18	31.02800 AU		-124 Apr 05 j 16:03	15°☾	
retrograde	-132 May 03 j 08:51	27°☾46'24		retrograde	-124 May 21 j 15:23	15°☾33'38	
min. Earth dist.	-132 Jul 22 j 11:50	26°☾23'06	29.02340 AU		-124 Jul 08 j 04:45	15°☾	
opposition	-132 Jul 23 j 04:52	26°☾21'56	0°-16'-53	opposition	-124 Aug 10 j 12:10	14°☾08'49	0°-52'-49
direct	-132 Oct 09 j 21:09	24°☾58'56		min. Earth dist.	-124 Aug 09 j 16:00	14°☾10'13	28.95667 AU
				direct	-124 Oct 27 j 15:04	12°☾45'53	
conjunction	-131 Jan 19 j 18:29	27°☾26'30	0°-17'-57		-123 Jan 31 j 10:23	15°☾	
minimum elong	-131 Jan 19 j 18:30	27°☾26'30	0°17'58				
max. Earth dist.	-131 Jan 20 j 12:13	27°☾28'11	31.01866 AU	conjunction	-123 Feb 06 j 10:40	15°☾13'40	0°-51'-21
retrograde	-131 May 05 j 21:33	29°☾59'16		minimum elong	-123 Feb 06 j 10:39	15°☾13'40	0°51'22
opposition	-131 Jul 25 j 17:52	28°☾34'44	0°-21'-31	max. Earth dist.	-123 Feb 07 j 07:00	15°☾15'35	30.95066 AU
min. Earth dist.	-131 Jul 25 j 00:34	28°☾35'55	29.01462 AU	retrograde	-123 May 24 j 06:19	17°☾47'31	
direct	-131 Oct 12 j 09:47	27°☾11'45		min. Earth dist.	-123 Aug 12 j 04:32	16°☾24'02	28.94535 AU
				opposition	-123 Aug 13 j 01:03	16°☾22'37	0°-57'-2
conjunction	-130 Jan 22 j 05:03	29°☾39'20	0°-22'-17		-123 Oct 25 j 11:40	15°☾	
minimum elong	-130 Jan 22 j 05:03	29°☾39'20	0°22'17	direct	-123 Oct 30 j 02:23	14°☾59'38	
max. Earth dist.	-130 Jan 22 j 23:05	29°☾41'03	31.01047 AU		-123 Nov 03 j 17:53	15°☾	
	-130 Jan 31 j 07:29	0°☾					
retrograde	-130 May 08 j 11:29	2°☾12'15		conjunction	-122 Feb 08 j 22:12	17°☾27'25	0°-55'-15
min. Earth dist.	-130 Jul 27 j 11:45	0°☾48'58	29.00688 AU	minimum elong	-122 Feb 08 j 22:12	17°☾27'25	0°55'16
opposition	-130 Jul 28 j 06:37	0°☾47'40	0°-26'-8	max. Earth dist.	-122 Feb 09 j 19:40	17°☾29'27	30.93908 AU
	-130 Aug 28 j 02:55	30°☾		retrograde	-122 May 26 j 19:04	20°☾01'21	
direct	-130 Oct 14 j 20:58	29°☾24'43		opposition	-122 Aug 15 j 13:41	18°☾36'22	-1°-1'-9
	-130 Nov 29 j 16:41	0°☾		min. Earth dist.	-122 Aug 14 j 17:26	18°☾37'46	28.93386 AU
				direct	-122 Nov 01 j 14:53	17°☾13'20	
conjunction	-129 Jan 24 j 15:43	1°☾52'19	0°-26'-34				
minimum elong	-129 Jan 24 j 15:43	1°☾52'19	0°26'35	conjunction	-121 Feb 11 j 09:42	19°☾41'09	0°-59'-4
max. Earth dist.	-129 Jan 25 j 10:32	1°☾54'06	31.00294 AU	minimum elong	-121 Feb 11 j 09:42	19°☾41'09	0°59'05
retrograde	-129 May 10 j 22:58	4°☾25'23		max. Earth dist.	-121 Feb 12 j 07:07	19°☾43'10	30.92783 AU
opposition	-129 Jul 30 j 19:35	3°☾00'47	0°-30'-42	retrograde	-121 May 29 j 09:18	22°☾15'10	
min. Earth dist.	-129 Jul 30 j 01:07	3°☾02'03	28.99964 AU	min. Earth dist.	-121 Aug 17 j 04:47	20°☾51'35	28.92301 AU
direct	-129 Oct 17 j 08:10	1°☾37'51		opposition	-121 Aug 18 j 02:17	20°☾50'06	-1°-5'-11
				direct	-121 Nov 04 j 02:26	19°☾27'01	
conjunction	-128 Jan 27 j 02:27	4°☾05'29	0°-30'-50				
minimum elong	-128 Jan 27 j 02:27	4°☾05'29	0°30'51	conjunction	-120 Feb 13 j 21:07	21°☾54'52	-1°-2'-48
max. Earth dist.	-128 Jan 27 j 22:13	4°☾07'22	30.99588 AU	minimum elong	-120 Feb 13 j 21:07	21°☾54'52	1°02'49
retrograde	-128 May 12 j 12:24	6°☾38'42		max. Earth dist.	-120 Feb 14 j 19:10	21°☾56'57	30.91726 AU
opposition	-128 Aug 01 j 08:26	5°☾14'05	0°-35'-15	retrograde	-120 May 30 j 21:35	24°☾28'59	
min. Earth dist.	-128 Jul 31 j 12:29	5°☾15'27	28.99256 AU	opposition	-120 Aug 19 j 14:59	23°☾03'51	-1°-9'-8
direct	-128 Oct 18 j 19:58	3°☾51'11		min. Earth dist.	-120 Aug 18 j 17:54	23°☾05'19	28.91310 AU
				direct	-120 Nov 05 j 14:13	21°☾40'45	
conjunction	-127 Jan 28 j 13:25	6°☾18'51	0°-35'-3				
minimum elong	-127 Jan 28 j 13:24	6°☾18'51	0°35'04	conjunction	-119 Feb 15 j 08:49	24°☾08'38	-1°-6'-26
max. Earth dist.	-127 Jan 29 j 09:01	6°☾20'43	30.98862 AU	minimum elong	-119 Feb 15 j 08:49	24°☾08'38	1°06'26
retrograde	-127 May 15 j 01:03	8°☾52'14		max. Earth dist.	-119 Feb 16 j 07:44	24°☾10'48	30.90801 AU
opposition	-127 Aug 03 j 21:28	7°☾27'35	0°-39'-44	retrograde	-119 Jun 02 j 12:03	26°☾42'51	
min. Earth dist.	-127 Aug 03 j 02:14	7°☾28'54	28.98519 AU	min. Earth dist.	-119 Aug 21 j 04:51	25°☾19'14	28.90452 AU
direct	-127 Oct 21 j 05:36	6°☾04'42		opposition	-119 Aug 22 j 03:25	25°☾17'41	-1°-12'-58
				direct	-119 Nov 08 j 02:28	23°☾54'34	
conjunction	-126 Jan 31 j 00:38	8°☾32'24	0°-39'-13				
minimum elong	-126 Jan 31 j 00:38	8°☾32'24	0°39'14	conjunction	-118 Feb 17 j 20:30	26°☾22'30	-1°-9'-58
max. Earth dist.	-126 Jan 31 j 21:23	8°☾34'22	30.98084 AU	minimum elong	-118 Feb 17 j 20:29	26°☾22'30	1°10'00
retrograde	-126 May 17 j 13:16	11°☾05'55		max. Earth dist.	-118 Feb 18 j 19:18	26°☾24'40	30.89997 AU
opposition	-126 Aug 06 j 10:21	9°☾41'14	0°-44'-9	retrograde	-118 Jun 05 j 00:11	28°☾56'50	
min. Earth dist.	-126 Aug 05 j 14:09	9°☾42'38	28.97687 AU	opposition	-118 Aug 24 j 16:02	27°☾31'38	-1°-16'-42
direct	-126 Oct 23 j 17:46	8°☾18'22		min. Earth dist.	-118 Aug 23 j 18:04	27°☾33'09	28.89721 AU
				direct	-118 Nov 10 j 12:26	26°☾08'31	
conjunction	-125 Feb 02 j 11:55	10°☾46'06	0°-43'-19				
minimum elong	-125 Feb 02 j 11:55	10°☾46'06	0°43'20	conjunction	-117 Feb 20 j 08:25	28°☾36'31	-1°-13'-24
max. Earth dist.	-125 Feb 03 j 07:41	10°☾47'58	30.97188 AU	minimum elong	-117 Feb 20 j 08:24	28°☾36'31	1°13'25
retrograde	-125 May 20 j 03:09	13°☾19'45		max. Earth dist.	-117 Feb 21 j 08:32	28°☾38'47	30.89319 AU
opposition	-125 Aug 08 j 23:15	11°☾55'01	0°-48'-31		-117 Mar 31 j 04:36	0°☾	
min. Earth dist.	-125 Aug 08 j 03:27	11°☾56'22	28.96739 AU	retrograde	-117 Jun 07 j 12:04	1°☾10'57	
direct	-125 Oct 26 j 03:11	10°☾32'06			-117 Aug 18 j 13:57	30°☾	

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Attention, astronomical year style is used: The year -117 in astronomical counting style is the year 118 BCE in historical counting style.

min. Earth dist.	-117 Aug 26 j 05:16	29° 47 '20	28.89093 AU	direct	-109 Nov 30 j 19:07	16° 19 '35	
opposition	-117 Aug 27 j 04:21	29° 45 '44	-1°-20'-19				
direct	-117 Nov 13 j 00:17	28° 22 '38		conjunction	-108 Mar 12 j 00:44	18° 48 '06	-1°-38'-49
	-116 Jan 31 j 01:57	0° 1 '		minimum elong	-108 Mar 12 j 00:44	18° 48 '05	1°38'51
				max. Earth dist.	-108 Mar 13 j 00:48	18° 50 '22	30.83434 AU
conjunction	-116 Feb 22 j 20:17	0° 50 '42	-1°-16'-44	retrograde	-108 Jun 27 j 13:22	21° 23 '00	
minimum elong	-116 Feb 22 j 20:16	0° 50 '42	1°16'45	opposition	-108 Sep 15 j 19:12	19° 57 '28	-1°-46'-51
max. Earth dist.	-116 Feb 23 j 19:41	0° 52 '55	30.88738 AU	min. Earth dist.	-108 Sep 14 j 20:54	19° 59 '02	28.83234 AU
retrograde	-116 Jun 09 j 01:45	3° 25 '15		direct	-108 Dec 02 j 07:45	18° 34 '02	
opposition	-116 Aug 28 j 16:55	2° 00 '02	-1°-23'-48				
min. Earth dist.	-116 Aug 27 j 18:07	2° 01 '37	28.88559 AU	conjunction	-107 Mar 14 j 13:27	21° 02 '36	-1°-40'-57
direct	-116 Nov 14 j 08:59	0° 36 '57		minimum elong	-107 Mar 14 j 13:27	21° 02 '36	1°40'57
				max. Earth dist.	-107 Mar 15 j 12:33	21° 04 '46	30.82836 AU
conjunction	-115 Feb 24 j 08:25	3° 05 '06	-1°-19'-56	retrograde	-107 Jun 30 j 02:52	23° 37 '31	
minimum elong	-115 Feb 24 j 08:25	3° 05 '06	1°19'57	min. Earth dist.	-107 Sep 17 j 09:27	22° 13 '29	28.82714 AU
max. Earth dist.	-115 Feb 25 j 09:10	3° 07 '26	30.88218 AU	opposition	-107 Sep 18 j 07:16	22° 11 '57	-1°-49'-3
retrograde	-115 Jun 11 j 14:15	5° 39 '46		direct	-107 Dec 04 j 17:29	20° 48 '29	
min. Earth dist.	-115 Aug 30 j 06:20	4° 16 '09	28.88046 AU				
opposition	-115 Aug 31 j 05:22	4° 14 '33	-1°-27'-11	conjunction	-106 Mar 17 j 02:32	23° 17 '06	-1°-42'-56
direct	-115 Nov 16 j 20:28	2° 51 '28		minimum elong	-106 Mar 17 j 02:31	23° 17 '06	1°42'57
				max. Earth dist.	-106 Mar 18 j 02:46	23° 19 '23	30.82378 AU
conjunction	-114 Feb 26 j 20:44	5° 19 '42	-1°-23'-2	retrograde	-106 Jul 02 j 14:25	25° 52 '01	
minimum elong	-114 Feb 26 j 20:44	5° 19 '42	1°23'03	opposition	-106 Sep 20 j 19:02	24° 26 '28	-1°-51'-5
max. Earth dist.	-114 Feb 27 j 20:30	5° 21 '56	30.87701 AU	min. Earth dist.	-106 Sep 19 j 20:56	24° 28 '01	28.82329 AU
retrograde	-114 Jun 14 j 04:51	7° 54 '27		direct	-106 Dec 07 j 05:18	23° 02 '58	
opposition	-114 Sep 02 j 17:42	6° 29 '14	-1°-30'-25				
min. Earth dist.	-114 Sep 01 j 18:45	6° 30 '50	28.87519 AU	conjunction	-105 Mar 19 j 15:29	25° 31 '40	-1°-44'-45
direct	-114 Nov 19 j 07:04	5° 06 '08		minimum elong	-105 Mar 19 j 15:29	25° 31 '40	1°44'45
				max. Earth dist.	-105 Mar 20 j 14:47	25° 33 '52	30.82072 AU
conjunction	-113 Mar 01 j 09:18	7° 34 '27	-1°-26'00	retrograde	-105 Jul 05 j 04:04	28° 06 '37	
minimum elong	-113 Mar 01 j 09:18	7° 34 '27	1°26'01	min. Earth dist.	-105 Sep 22 j 08:45	26° 42 '38	28.82101 AU
max. Earth dist.	-113 Mar 02 j 09:42	7° 36 '45	30.87124 AU	opposition	-105 Sep 23 j 06:58	26° 41 '05	-1°-52'-56
retrograde	-113 Jun 16 j 17:33	10° 09 '17		direct	-105 Dec 09 j 15:24	25° 17 '34	
min. Earth dist.	-113 Sep 04 j 07:57	8° 45 '35	28.86904 AU				
opposition	-113 Sep 05 j 06:12	8° 44 '02	-1°-33'-31	conjunction	-104 Mar 21 j 04:30	27° 46 '22	-1°-46'-25
direct	-113 Nov 21 j 18:50	7° 20 '55		minimum elong	-104 Mar 21 j 04:30	27° 46 '22	1°46'26
				max. Earth dist.	-104 Mar 22 j 04:45	27° 48 '39	30.81900 AU
conjunction	-112 Mar 02 j 21:45	9° 49 '17	-1°-28'-51		-104 May 31 j 09:14	0° 0 '	
minimum elong	-112 Mar 02 j 21:45	9° 49 '17	1°28'52	retrograde	-104 Jul 06 j 16:15	0° 21 '22	
max. Earth dist.	-112 Mar 03 j 21:26	9° 51 '31	30.86469 AU		-104 Aug 12 j 16:03	30° 0 '	
retrograde	-112 Jun 18 j 08:25	12° 24 '10		opposition	-104 Sep 24 j 18:55	28° 55 '51	-1°-54'-38
opposition	-112 Sep 06 j 18:37	10° 58 '53	-1°-36'-29	min. Earth dist.	-104 Sep 23 j 21:16	28° 57 '22	28.81986 AU
min. Earth dist.	-112 Sep 05 j 19:49	11° 00 '28	28.86206 AU	direct	-104 Dec 11 j 02:23	27° 32 '21	
direct	-112 Nov 23 j 06:24	9° 35 '42					
				conjunction	-103 Mar 23 j 17:46	0° 01 '15	-1°-47'-54
conjunction	-111 Mar 05 j 10:26	12° 04 '07	-1°-31'-33	minimum elong	-103 Mar 23 j 17:46	0° 01 '15	1°47'55
minimum elong	-111 Mar 05 j 10:26	12° 04 '07	1°31'33		-103 Mar 23 j 04:31	0° 0 '	
max. Earth dist.	-111 Mar 06 j 09:59	12° 06 '21	30.85719 AU	max. Earth dist.	-103 Mar 24 j 17:18	0° 03 '28	30.81842 AU
retrograde	-111 Jun 20 j 21:46	14° 39 '01		retrograde	-103 Jul 09 j 07:12	2° 36 '17	
min. Earth dist.	-111 Sep 08 j 09:18	13° 15 '11	28.85432 AU	min. Earth dist.	-103 Sep 26 j 08:36	1° 12 '22	28.81964 AU
opposition	-111 Sep 09 j 06:57	13° 13 '40	-1°-39'-19	opposition	-103 Sep 27 j 06:39	1° 10 '49	-1°-56'-8
direct	-111 Nov 25 j 18:57	11° 50 '26			-103 Nov 16 j 05:21	30° 0 '	
				direct	-103 Dec 13 j 13:20	29° 47 '19	
conjunction	-110 Mar 07 j 23:15	14° 18 '53	-1°-34'-7		-102 Jan 09 j 15:17	0° 0 '	
minimum elong	-110 Mar 07 j 23:14	14° 18 '53	1°34'09				
max. Earth dist.	-110 Mar 08 j 22:55	14° 21 '07	30.84934 AU	conjunction	-102 Mar 26 j 07:15	2° 16 '21	-1°-49'-14
retrograde	-110 Jun 23 j 12:32	16° 53 '47		minimum elong	-102 Mar 26 j 07:15	2° 16 '21	1°49'16
opposition	-110 Sep 11 j 19:05	15° 28 '22	-1°-41'-59	max. Earth dist.	-102 Mar 27 j 06:37	2° 18 '33	30.81825 AU
min. Earth dist.	-110 Sep 10 j 20:36	15° 29 '56	28.84641 AU	retrograde	-102 Jul 11 j 20:48	4° 51 '25	
direct	-110 Nov 28 j 08:18	14° 05 '04		opposition	-102 Sep 29 j 18:34	3° 26 '00	-1°-57'-28
				min. Earth dist.	-102 Sep 28 j 21:53	3° 27 '28	28.81954 AU
conjunction	-109 Mar 10 j 11:53	16° 33 '32	-1°-36'-32	direct	-102 Dec 16 j 01:26	2° 02 '31	
minimum elong	-109 Mar 10 j 11:52	16° 33 '32	1°36'33				
max. Earth dist.	-109 Mar 11 j 10:58	16° 35 '43	30.84143 AU	conjunction	-101 Mar 28 j 20:49	4° 31 '40	-1°-50'-24
retrograde	-109 Jun 26 j 00:37	19° 08 '26		minimum elong	-101 Mar 28 j 20:49	4° 31 '40	1°50'25
min. Earth dist.	-109 Sep 13 j 09:48	17° 44 '28	28.83890 AU	max. Earth dist.	-101 Mar 29 j 19:50	4° 33 '50	30.81804 AU
opposition	-109 Sep 14 j 07:14	17° 42 '58	-1°-44'-30	retrograde	-101 Jul 14 j 11:52	7° 06 '45	

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Attention, astronomical year style is used: The year -101 in astronomical counting style is the year 102 BCE in historical counting style.

min. Earth dist.	-101 Oct 01 j 09:12	5°Y42'52	28.81903 AU	conjunction	-92 Apr 18 j 01:33	24°Y49'30	-1°-53'-12
opposition	-101 Oct 02 j 06:20	5°Y41'23	-1°-58'-38	minimum elong	-92 Apr 18 j 01:33	24°Y49'30	1°53'14
direct	-101 Dec 18 j 14:39	4°Y17'53		max. Earth dist.	-92 Apr 18 j 19:52	24°Y51'13	30.80750 AU
				retrograde	-92 Aug 03 j 07:26	27°Y24'02	
conjunction	-100 Mar 30 j 10:30	6°Y47'08	-1°-51'-24	opposition	-92 Oct 21 j 13:47	25°Y58'43	-2°00'-46
minimum elong	-100 Mar 30 j 10:30	6°Y47'08	1°51'26	min. Earth dist.	-92 Oct 20 j 21:00	25°Y59'54	28.81029 AU
max. Earth dist.	-100 Mar 31 j 08:22	6°Y49'12	30.81709 AU	direct	-91 Jan 06 j 23:47	24°Y34'44	
retrograde	-100 Jul 16 j 01:03	9°Y22'13					
opposition	-100 Oct 03 j 18:15	7°Y56'52	-1°-59'-36	conjunction	-91 Apr 20 j 15:38	27°Y04'37	-1°-52'-38
min. Earth dist.	-100 Oct 02 j 22:46	7°Y58'14	28.81774 AU	minimum elong	-91 Apr 20 j 15:38	27°Y04'37	1°52'39
direct	-100 Dec 20 j 01:35	6°Y33'21		max. Earth dist.	-91 Apr 21 j 09:05	27°Y06'15	30.81075 AU
				retrograde	-91 Aug 05 j 20:34	29°Y39'05	
conjunction	-99 Apr 02 j 00:23	9°Y02'41	-1°-52'-14	min. Earth dist.	-91 Oct 23 j 09:53	28°Y14'54	28.81402 AU
minimum elong	-99 Apr 02 j 00:23	9°Y02'41	1°52'14	opposition	-91 Oct 24 j 01:07	28°Y13'49	-2°00'-5
max. Earth dist.	-99 Apr 02 j 22:20	9°Y04'45	30.81539 AU	direct	-90 Jan 09 j 10:43	26°Y49'50	
retrograde	-99 Jul 18 j 15:18	11°Y37'43					
min. Earth dist.	-99 Oct 05 j 10:20	10°Y13'45	28.81551 AU	conjunction	-90 Apr 23 j 05:56	29°Y19'49	-1°-51'-54
opposition	-99 Oct 06 j 05:58	10°Y12'22	-2°00'-24	minimum elong	-90 Apr 23 j 05:56	29°Y19'49	1°51'55
direct	-99 Dec 22 j 15:02	8°Y48'48		max. Earth dist.	-90 Apr 23 j 23:29	29°Y21'28	30.81485 AU
					-90 May 11 j 07:29	0°8	
conjunction	-98 Apr 04 j 14:12	11°Y18'13	-1°-52'-53	retrograde	-90 Aug 08 j 10:54	1°854'12	
minimum elong	-98 Apr 04 j 14:12	11°Y18'13	1°52'55	opposition	-90 Oct 26 j 12:10	0°829'01	-1°-59'-12
max. Earth dist.	-98 Apr 05 j 10:23	11°Y20'06	30.81283 AU	min. Earth dist.	-90 Oct 25 j 20:52	0°830'07	28.81819 AU
retrograde	-98 Jul 21 j 05:06	13°Y53'12			-90 Nov 12 j 22:07	30°8Y	
opposition	-98 Oct 08 j 17:36	12°Y27'50	-2°-1'00	direct	-89 Jan 12 j 00:22	29°Y05'02	
min. Earth dist.	-98 Oct 07 j 23:12	12°Y29'08	28.81279 AU		-89 Mar 11 j 03:33	0°8	
direct	-98 Dec 25 j 01:44	11°Y04'12					
				conjunction	-89 Apr 25 j 20:10	1°835'08	-1°-51'00
conjunction	-97 Apr 07 j 04:07	13°Y33'39	-1°-53'-22	minimum elong	-89 Apr 25 j 20:10	1°835'08	1°51'00
minimum elong	-97 Apr 07 j 04:07	13°Y33'39	1°53'23	max. Earth dist.	-89 Apr 26 j 11:54	1°836'36	30.81908 AU
max. Earth dist.	-97 Apr 08 j 00:50	13°Y35'36	30.81000 AU	retrograde	-89 Aug 11 j 00:41	4°809'27	
retrograde	-97 Jul 23 j 16:12	16°Y08'34		opposition	-89 Oct 28 j 23:27	2°844'20	-1°-58'-8
min. Earth dist.	-97 Oct 10 j 10:53	14°Y44'29	28.80996 AU	min. Earth dist.	-89 Oct 28 j 09:33	2°845'19	28.82236 AU
opposition	-97 Oct 11 j 05:07	14°Y43'12	-2°-1'-26	direct	-88 Jan 14 j 11:32	1°820'20	
direct	-97 Dec 27 j 14:28	13°Y19'30					
				conjunction	-88 Apr 27 j 10:35	3°850'31	-1°-49'-55
conjunction	-96 Apr 08 j 17:45	15°Y48'59	-1°-53'-41	minimum elong	-88 Apr 27 j 10:36	3°850'31	1°49'56
minimum elong	-96 Apr 08 j 17:45	15°Y48'59	1°53'42	max. Earth dist.	-88 Apr 28 j 02:24	3°852'00	30.82293 AU
max. Earth dist.	-96 Apr 09 j 13:00	15°Y50'48	30.80745 AU	retrograde	-88 Aug 12 j 12:57	6°824'45	
retrograde	-96 Jul 25 j 05:02	18°Y23'50		opposition	-88 Oct 30 j 10:40	4°859'42	-1°-56'-53
opposition	-96 Oct 12 j 16:38	16°Y58'27	-2°-1'-40	min. Earth dist.	-88 Oct 29 j 21:24	5°800'39	28.82570 AU
min. Earth dist.	-96 Oct 11 j 22:48	16°Y59'42	28.80776 AU	direct	-87 Jan 16 j 00:29	3°835'41	
direct	-96 Dec 29 j 00:59	15°Y34'40					
				conjunction	-87 Apr 30 j 01:04	6°805'57	-1°-48'-40
conjunction	-95 Apr 11 j 07:45	18°Y04'13	-1°-53'-50	minimum elong	-87 Apr 30 j 01:05	6°805'57	1°48'40
minimum elong	-95 Apr 11 j 07:45	18°Y04'13	1°53'50	max. Earth dist.	-87 Apr 30 j 14:37	6°807'13	30.82589 AU
max. Earth dist.	-95 Apr 12 j 03:34	18°Y06'05	30.80557 AU	retrograde	-87 Aug 15 j 02:36	8°840'04	
retrograde	-95 Jul 27 j 16:32	20°Y38'58		opposition	-87 Nov 01 j 21:46	7°815'04	-1°-55'-28
min. Earth dist.	-95 Oct 14 j 10:58	19°Y14'47	28.80639 AU	min. Earth dist.	-87 Nov 01 j 09:27	7°815'56	28.82817 AU
opposition	-95 Oct 15 j 03:57	19°Y13'35	-2°-1'-44	direct	-86 Jan 18 j 11:30	5°850'59	
direct	-95 Dec 31 j 11:50	17°Y49'44					
				conjunction	-86 May 02 j 15:42	8°821'20	-1°-47'-15
conjunction	-94 Apr 13 j 21:40	20°Y19'21	-1°-53'-47	minimum elong	-86 May 02 j 15:43	8°821'20	1°47'17
minimum elong	-94 Apr 13 j 21:40	20°Y19'21	1°53'49	max. Earth dist.	-86 May 03 j 05:11	8°822'36	30.82787 AU
max. Earth dist.	-94 Apr 14 j 16:23	20°Y21'07	30.80488 AU	retrograde	-86 Aug 17 j 14:02	10°855'20	
retrograde	-94 Jul 30 j 05:48	22°Y54'02		opposition	-86 Nov 04 j 08:56	9°830'21	-1°-53'-52
opposition	-94 Oct 17 j 15:15	21°Y28'39	-2°-1'-36	min. Earth dist.	-86 Nov 03 j 21:58	9°831'08	28.82969 AU
min. Earth dist.	-94 Oct 16 j 21:54	21°Y29'53	28.80634 AU	direct	-85 Jan 20 j 22:56	8°806'13	
direct	-93 Jan 02 j 23:10	20°Y04'44					
				conjunction	-85 May 05 j 05:59	10°836'37	-1°-45'-41
conjunction	-93 Apr 16 j 11:31	22°Y34'26	-1°-53'-35	minimum elong	-85 May 05 j 05:59	10°836'37	1°45'42
minimum elong	-93 Apr 16 j 11:32	22°Y34'26	1°53'35	max. Earth dist.	-85 May 05 j 17:43	10°837'43	30.82927 AU
max. Earth dist.	-93 Apr 17 j 06:14	22°Y36'11	30.80540 AU	retrograde	-85 Aug 20 j 02:34	13°810'29	
retrograde	-93 Aug 01 j 17:26	25°Y09'02		opposition	-85 Nov 06 j 19:54	11°845'32	-1°-52'-6
min. Earth dist.	-93 Oct 19 j 10:27	23°Y44'49	28.80760 AU	min. Earth dist.	-85 Nov 06 j 09:05	11°846'18	28.83090 AU
opposition	-93 Oct 20 j 02:39	23°Y43'40	-2°-1'-17	direct	-84 Jan 23 j 10:44	10°821'18	
direct	-92 Jan 05 j 11:10	22°Y19'44					

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Attention, astronomical year style is used: The year -84 in astronomical counting style is the year 85 BCE in historical counting style.

conjunction	-84 May 06 j 20:26	12°♄51'46	-1°-43'-57	opposition	-77 Nov 24 j 09:32	29°♄43'37	-1°-32'-10
minimum elong	-84 May 06 j 20:26	12°♄51'46	1°43'59	min. Earth dist.	-77 Nov 24 j 04:42	29°♄43'58	28.87065 AU
max. Earth dist.	-84 May 07 j 07:46	12°♄52'49	30.83042 AU	direct	-76 Feb 10 j 11:47	28°♄19'05	
	-84 Jul 13 j 03:46	15°♄			-76 May 02 j 18:33	0°♄	
retrograde	-84 Aug 21 j 13:12	15°♄25'29					
	-84 Sep 30 j 13:51	15°♄		conjunction	-76 May 25 j 15:04	0°♄50'12	-1°-24'-44
opposition	-84 Nov 08 j 06:48	14°♄00'33	-1°-50'-10	minimum elong	-76 May 25 j 15:04	0°♄50'12	1°24'45
min. Earth dist.	-84 Nov 07 j 21:37	14°♄01'12	28.83215 AU	max. Earth dist.	-76 May 25 j 19:47	0°♄50'38	30.87424 AU
direct	-83 Jan 24 j 22:33	12°♄36'15		retrograde	-76 Sep 08 j 18:16	3°♄22'49	
	-83 May 06 j 10:21	15°♄		opposition	-76 Nov 25 j 20:02	1°♄58'27	-1°-28'-59
				min. Earth dist.	-76 Nov 25 j 15:34	1°♄58'46	28.87896 AU
conjunction	-83 May 09 j 10:51	15°♄06'46	-1°-42'-4	direct	-75 Feb 11 j 23:28	0°♄33'53	
minimum elong	-83 May 09 j 10:51	15°♄06'46	1°42'05				
max. Earth dist.	-83 May 09 j 21:13	15°♄07'44	30.83203 AU	conjunction	-75 May 28 j 05:41	3°♄05'04	-1°-21'-42
retrograde	-83 Aug 24 j 02:19	17°♄40'20		minimum elong	-75 May 28 j 05:41	3°♄05'04	1°21'43
opposition	-83 Nov 10 j 17:33	16°♄15'26	-1°-48'-4	max. Earth dist.	-75 May 28 j 09:45	3°♄05'27	30.88213 AU
min. Earth dist.	-83 Nov 10 j 08:03	16°♄16'06	28.83400 AU	retrograde	-75 Sep 11 j 04:47	5°♄37'33	
	-82 Jan 04 j 11:07	15°♄		opposition	-75 Nov 28 j 06:47	4°♄13'15	-1°-25'-41
direct	-82 Jan 27 j 11:06	14°♄51'03		min. Earth dist.	-75 Nov 28 j 04:15	4°♄13'25	28.88640 AU
	-82 Feb 19 j 08:59	15°♄		direct	-74 Feb 14 j 10:35	2°♄48'38	
conjunction	-82 May 12 j 01:08	17°♄21'38	-1°-40'-2	conjunction	-74 May 30 j 20:06	5°♄19'53	-1°-18'-33
minimum elong	-82 May 12 j 01:08	17°♄21'38	1°40'03	minimum elong	-74 May 30 j 20:06	5°♄19'53	1°18'34
max. Earth dist.	-82 May 12 j 10:34	17°♄22'31	30.83428 AU	max. Earth dist.	-74 May 30 j 22:35	5°♄20'07	30.88922 AU
retrograde	-82 Aug 26 j 14:02	19°♄55'04		retrograde	-74 Sep 13 j 17:26	7°♄52'11	
opposition	-82 Nov 13 j 04:19	18°♄30'12	-1°-45'-48	opposition	-74 Nov 30 j 17:17	6°♄27'56	-1°-22'-15
min. Earth dist.	-82 Nov 12 j 20:23	18°♄30'45	28.83686 AU	min. Earth dist.	-74 Nov 30 j 14:47	6°♄28'07	28.89296 AU
direct	-81 Jan 29 j 22:16	17°♄05'45		direct	-73 Feb 16 j 22:32	5°♄03'16	
conjunction	-81 May 14 j 15:27	19°♄36'24	-1°-37'-51	conjunction	-73 Jun 02 j 10:30	7°♄34'33	-1°-15'-17
minimum elong	-81 May 14 j 15:27	19°♄36'24	1°37'51	minimum elong	-73 Jun 02 j 10:30	7°♄34'33	1°15'18
max. Earth dist.	-81 May 15 j 00:54	19°♄37'17	30.83788 AU	max. Earth dist.	-73 Jun 02 j 11:42	7°♄34'40	30.89543 AU
retrograde	-81 Aug 29 j 03:28	22°♄09'41		retrograde	-73 Sep 16 j 03:43	10°♄06'40	
opposition	-81 Nov 15 j 14:57	20°♄44'51	-1°-43'-23	opposition	-73 Dec 03 j 03:53	8°♄42'28	-1°-18'-42
min. Earth dist.	-81 Nov 15 j 06:43	20°♄45'27	28.84108 AU	min. Earth dist.	-73 Dec 03 j 03:20	8°♄42'30	28.89892 AU
direct	-80 Feb 01 j 12:22	19°♄20'22		direct	-72 Feb 19 j 10:04	7°♄17'43	
conjunction	-80 May 16 j 05:35	21°♄51'06	-1°-35'-31	conjunction	-72 Jun 04 j 00:51	9°♄49'02	-1°-11'-55
minimum elong	-80 May 16 j 05:35	21°♄51'06	1°35'31	minimum elong	-72 Jun 04 j 00:52	9°♄49'02	1°11'56
max. Earth dist.	-80 May 16 j 13:33	21°♄51'51	30.84290 AU	max. Earth dist.	-72 Jun 04 j 01:28	9°♄49'05	30.90129 AU
retrograde	-80 Aug 30 j 16:15	24°♄24'16		retrograde	-72 Sep 17 j 15:37	12°♄20'56	
opposition	-80 Nov 17 j 01:41	22°♄59'29	-1°-40'-49	opposition	-72 Dec 04 j 14:17	10°♄56'46	-1°-15'-3
min. Earth dist.	-80 Nov 16 j 18:33	23°♄00'00	28.84688 AU	min. Earth dist.	-72 Dec 04 j 13:54	10°♄56'48	28.90450 AU
direct	-79 Feb 02 j 23:59	21°♄34'58		direct	-71 Feb 21 j 00:11	9°♄31'57	
conjunction	-79 May 18 j 20:01	24°♄05'48	-1°-33'-2	conjunction	-71 Jun 06 j 15:07	12°♄03'17	-1°-8'-27
minimum elong	-79 May 18 j 20:01	24°♄05'48	1°33'02	minimum elong	-71 Jun 06 j 15:07	12°♄03'17	1°08'27
max. Earth dist.	-79 May 19 j 04:19	24°♄06'34	30.84945 AU	max. Earth dist.	-71 Jun 06 j 13:56	12°♄03'11	30.90691 AU
retrograde	-79 Sep 02 j 04:27	26°♄38'48		retrograde	-71 Sep 20 j 03:26	14°♄35'00	
opposition	-79 Nov 19 j 12:12	25°♄14'08	-1°-38'-5	opposition	-71 Dec 07 j 00:39	13°♄10'52	-1°-11'-17
min. Earth dist.	-79 Nov 19 j 05:24	25°♄14'37	28.85395 AU	min. Earth dist.	-71 Dec 07 j 01:41	13°♄10'47	28.91030 AU
direct	-78 Feb 05 j 12:47	23°♄49'36		direct	-70 Feb 23 j 11:54	11°♄45'57	
conjunction	-78 May 21 j 10:19	26°♄20'32	-1°-30'-24	conjunction	-70 Jun 09 j 05:22	14°♄17'20	-1°-4'-52
minimum elong	-78 May 21 j 10:19	26°♄20'32	1°30'25	minimum elong	-70 Jun 09 j 05:23	14°♄17'20	1°04'53
max. Earth dist.	-78 May 21 j 16:43	26°♄21'08	30.85723 AU	max. Earth dist.	-70 Jun 09 j 04:19	14°♄17'14	30.91299 AU
retrograde	-78 Sep 04 j 18:42	28°♄53'25		retrograde	-70 Sep 22 j 15:03	16°♄48'50	
opposition	-78 Nov 21 j 22:51	27°♄28'50	-1°-35'-11	opposition	-70 Dec 09 j 11:01	15°♄24'44	-1°-7'-24
min. Earth dist.	-78 Nov 21 j 16:41	27°♄29'17	28.86216 AU	min. Earth dist.	-70 Dec 09 j 12:27	15°♄24'38	28.91663 AU
direct	-77 Feb 08 j 00:09	26°♄04'18		direct	-69 Feb 26 j 01:18	13°♄59'47	
conjunction	-77 May 24 j 00:38	28°♄35'20	-1°-27'-38	conjunction	-69 Jun 11 j 19:11	16°♄31'11	-1°-1'-12
minimum elong	-77 May 24 j 00:38	28°♄35'20	1°27'38	minimum elong	-69 Jun 11 j 19:11	16°♄31'11	1°01'13
max. Earth dist.	-77 May 24 j 07:20	28°♄35'57	30.86569 AU	max. Earth dist.	-69 Jun 11 j 16:18	16°♄30'55	30.91988 AU
	-77 Jul 03 j 00:27	0°♄		retrograde	-69 Sep 25 j 04:20	19°♄02'30	
retrograde	-77 Sep 07 j 05:48	1°♄08'06		opposition	-69 Dec 11 j 21:21	17°♄38'27	-1°-3'-26
	-77 Nov 14 j 17:28	30°♄		min. Earth dist.	-69 Dec 11 j 23:15	17°♄38'19	28.92413 AU
























































































































Planetary Phenomena of Neptune from -400 through 100 (UT), Astrodienst AG 7-Dez-2017 14:48, page 22

Attention, astronomical year style is used: The year -68 in astronomical counting style is the year 69 BCE in historical counting style.

direct	-68 Feb 28 j 13:34	16°II13'26		opposition	-61 Dec 29 j 08:01	5°☾28'14	0°-28'-47
				min. Earth dist.	-61 Dec 29 j 16:38	5°☾27'38	29.00880 AU
conjunction	-68 Jun 13 j 09:18	18°II44'53	0°-57'-27	direct	-60 Mar 17 j 12:04	4°☾03'11	
minimum elong	-68 Jun 13 j 09:18	18°II44'53	0°57'28				
max. Earth dist.	-68 Jun 13 j 06:51	18°II44'39	30.92799 AU	conjunction	-60 Jul 02 j 00:21	6°☾35'07	0°-24'-47
retrograde	-68 Sep 26 j 14:39	21°II16'01		minimum elong	-60 Jul 02 j 00:21	6°☾35'07	0°24'48
opposition	-68 Dec 13 j 07:36	19°II52'03	0°-59'-22	max. Earth dist.	-60 Jul 01 j 13:02	6°☾34'04	31.01292 AU
min. Earth dist.	-68 Dec 13 j 10:35	19°II51'50	28.93286 AU	retrograde	-60 Oct 14 j 11:13	9°☾05'03	
direct	-67 Mar 02 j 01:53	18°II27'01		opposition	-60 Dec 30 j 18:15	7°☾41'51	0°-24'-12
				min. Earth dist.	-60 Dec 31 j 03:40	7°☾41'11	29.01706 AU
conjunction	-67 Jun 15 j 23:14	20°II58'31	0°-53'-36	direct	-59 Mar 20 j 01:12	6°☾16'45	
minimum elong	-67 Jun 15 j 23:14	20°II58'31	0°53'37				
max. Earth dist.	-67 Jun 15 j 19:09	20°II58'08	30.93755 AU	conjunction	-59 Jul 04 j 14:09	8°☾48'41	0°-20'-29
retrograde	-67 Sep 29 j 03:00	23°II29'29		minimum elong	-59 Jul 04 j 14:10	8°☾48'41	0°20'30
opposition	-67 Dec 15 j 17:52	22°II05'37	0°-55'-13	max. Earth dist.	-59 Jul 04 j 02:56	8°☾47'40	31.02080 AU
min. Earth dist.	-67 Dec 15 j 20:40	22°II05'25	28.94308 AU	retrograde	-59 Oct 16 j 20:59	11°☾18'26	
direct	-66 Mar 04 j 13:36	20°II40'34		opposition	-58 Jan 02 j 04:39	9°☾55'16	0°-19'-36
				min. Earth dist.	-58 Jan 02 j 15:28	9°☾54'31	29.02466 AU
conjunction	-66 Jun 18 j 13:07	23°II12'09	0°-49'-41	direct	-58 Mar 22 j 14:23	8°☾30'07	
minimum elong	-66 Jun 18 j 13:08	23°II12'09	0°49'42				
max. Earth dist.	-66 Jun 18 j 09:08	23°II11'47	30.94836 AU	conjunction	-58 Jul 07 j 03:29	11°☾02'03	0°-16'-10
retrograde	-66 Oct 01 j 13:20	25°II42'59		minimum elong	-58 Jul 07 j 03:28	11°☾02'03	0°16'11
opposition	-66 Dec 18 j 04:15	24°II19'14	0°-50'-59	max. Earth dist.	-58 Jul 06 j 14:28	11°☾00'51	31.02838 AU
min. Earth dist.	-66 Dec 18 j 08:33	24°II18'55	28.95442 AU	retrograde	-58 Oct 19 j 09:13	13°☾31'35	
direct	-65 Mar 07 j 00:12	22°II54'12		opposition	-57 Jan 04 j 14:52	12°☾08'28	0°-14'-58
				min. Earth dist.	-57 Jan 05 j 01:38	12°☾07'43	29.03226 AU
conjunction	-65 Jun 21 j 02:58	25°II25'51	0°-45'-40	direct	-57 Mar 25 j 03:00	10°☾43'15	
minimum elong	-65 Jun 21 j 02:58	25°II25'51	0°45'42				
max. Earth dist.	-65 Jun 20 j 21:44	25°II25'22	30.96025 AU	conjunction	-57 Jul 09 j 16:54	13°☾15'11	0°-11'-50
retrograde	-65 Oct 04 j 01:39	27°II56'33		minimum elong	-57 Jul 09 j 16:54	13°☾15'11	0°11'51
opposition	-65 Dec 20 j 14:23	26°II32'56	0°-46'-40	behind sun begin	-57 Jul 09 j 12:24	13°☾14'47	
min. Earth dist.	-65 Dec 20 j 18:30	26°II32'39	28.96646 AU	behind sun end	-57 Jul 09 j 21:25	13°☾15'35	
direct	-64 Mar 08 j 11:14	25°II07'56		max. Earth dist.	-57 Jul 09 j 04:01	13°☾14'00	31.03604 AU
				retrograde	-57 Oct 21 j 19:20	15°☾44'31	
conjunction	-64 Jun 22 j 16:54	27°II39'40	0°-41'-36	opposition	-56 Jan 07 j 01:07	14°☾21'26	0°-10'-19
minimum elong	-64 Jun 22 j 16:54	27°II39'40	0°41'37	min. Earth dist.	-56 Jan 07 j 13:25	14°☾20'34	29.04024 AU
max. Earth dist.	-64 Jun 22 j 10:43	27°II39'05	30.97230 AU	direct	-56 Mar 26 j 14:43	12°☾56'10	
	-64 Sep 10 j 23:50	0°☾					
retrograde	-64 Oct 05 j 11:37	0°☾10'15		conjunction	-56 Jul 11 j 06:08	15°☾28'05	0°-7'-29
	-64 Oct 30 j 06:33	30°RII		minimum elong	-56 Jul 11 j 06:08	15°☾28'05	0°07'30
opposition	-64 Dec 22 j 00:49	28°II46'45	0°-42'-17	behind sun begin	-56 Jul 11 j 00:09	15°☾27'33	
min. Earth dist.	-64 Dec 22 j 06:52	28°II46'19	28.97841 AU	behind sun end	-56 Jul 11 j 12:06	15°☾28'37	
direct	-63 Mar 10 j 22:16	27°II21'45		max. Earth dist.	-56 Jul 10 j 16:05	15°☾26'47	31.04444 AU
				retrograde	-56 Oct 23 j 06:28	17°☾57'14	
conjunction	-63 Jun 25 j 06:55	29°II53'34	0°-37'-28	opposition	-55 Jan 08 j 11:19	16°☾34'12	0°-5'-39
minimum elong	-63 Jun 25 j 06:55	29°II53'34	0°37'29	min. Earth dist.	-55 Jan 08 j 23:05	16°☾33'22	29.04902 AU
max. Earth dist.	-63 Jun 24 j 23:56	29°II52'55	30.98397 AU	direct	-55 Mar 29 j 02:57	15°☾08'53	
	-63 Jun 28 j 04:06	0°☾					
retrograde	-63 Oct 07 j 23:03	2°☾24'00		conjunction	-55 Jul 13 j 19:18	17°☾40'48	0°-3'-8
opposition	-63 Dec 24 j 11:07	1°☾00'37	0°-37'-50	minimum elong	-55 Jul 13 j 19:18	17°☾40'48	0°03'09
min. Earth dist.	-63 Dec 24 j 17:27	1°☾00'10	28.98955 AU	behind sun begin	-55 Jul 13 j 12:45	17°☾40'13	
	-62 Feb 02 j 07:25	30°RII		behind sun end	-55 Jul 14 j 01:52	17°☾41'23	
direct	-62 Mar 13 j 11:27	29°II35'37		max. Earth dist.	-55 Jul 13 j 04:50	17°☾39'28	31.05366 AU
	-62 Apr 21 j 05:15	0°☾		retrograde	-55 Oct 25 j 15:13	20°☾09'47	
				opposition	-54 Jan 10 j 21:39	18°☾46'49	0°00'-59
conjunction	-62 Jun 27 j 20:48	2°☾07'29	0°-33'-17	min. Earth dist.	-54 Jan 11 j 10:46	18°☾45'54	29.05892 AU
minimum elong	-62 Jun 27 j 20:48	2°☾07'29	0°33'18	asc. node	-54 Mar 30 j 04:54	17°☾21'31	
max. Earth dist.	-62 Jun 27 j 11:59	2°☾06'40	30.99463 AU	direct	-54 Mar 31 j 13:49	17°☾21'30	
retrograde	-62 Oct 10 j 10:44	4°☾37'47					
opposition	-62 Dec 26 j 21:37	3°☾14'28	0°-33'-20	conjunction	-54 Jul 16 j 08:24	19°☾53'25	0°01'20
min. Earth dist.	-62 Dec 27 j 05:26	3°☾13'55	28.99978 AU	minimum elong	-54 Jul 16 j 08:24	19°☾53'25	0°01'20
direct	-61 Mar 15 j 22:24	1°☾49'27		behind sun begin	-54 Jul 16 j 01:49	19°☾52'50	
				behind sun end	-54 Jul 16 j 14:58	19°☾54'00	
conjunction	-61 Jun 30 j 10:36	4°☾21'21	0°-29'-3	max. Earth dist.	-54 Jul 15 j 17:44	19°☾52'04	31.06421 AU
minimum elong	-61 Jun 30 j 10:37	4°☾21'21	0°29'04	retrograde	-54 Oct 28 j 01:37	22°☾22'15	
max. Earth dist.	-61 Jun 30 j 01:34	4°☾20'31	31.00430 AU	opposition	-53 Jan 13 j 07:55	20°☾59'22	0°03'40
retrograde	-61 Oct 12 j 22:05	6°☾51'29		min. Earth dist.	-53 Jan 13 j 20:44	20°☾58'27	29.06991 AU

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Attention, astronomical year style is used: The year -53 in astronomical counting style is the year 54 BCE in historical counting style.

direct	-53 Apr 03 j 01:54	19°  34'02		conjunction	-46 Aug 03 j 14:47	7°  33'38	0°35'35
				minimum elong	-46 Aug 03 j 14:47	7°  33'38	0°35'36
conjunction	-53 Jul 18 j 21:16	22°  05'59	0°05'43	max. Earth dist.	-46 Aug 02 j 17:55	7°  31'42	31.14199 AU
minimum elong	-53 Jul 18 j 21:16	22°  05'59	0°05'43	retrograde	-46 Nov 14 j 15:39	10°  01'27	
behind sun begin	-53 Jul 18 j 14:58	22°  05'25		opposition	-45 Jan 30 j 19:23	8°  39'05	0°40'10
behind sun end	-53 Jul 19 j 03:34	22°  06'32		min. Earth dist.	-45 Jan 31 j 14:33	8°  37'44	29.14555 AU
max. Earth dist.	-53 Jul 18 j 05:32	22°  04'32	31.07565 AU	direct	-45 Apr 21 j 02:55	7°  13'44	
retrograde	-53 Oct 30 j 12:32	24°  34'42		max. Earth dist.	-45 Aug 05 j 05:57	9°  43'44	31.14841 AU
opposition	-52 Jan 15 j 18:14	23°  11'54	0°08'20				
min. Earth dist.	-52 Jan 16 j 08:05	23°  10'56	29.08172 AU	conjunction	-45 Aug 06 j 03:00	9°  45'42	0°39'41
direct	-52 Apr 04 j 11:56	21°  46'35		minimum elong	-45 Aug 06 j 03:00	9°  45'42	0°39'41
				retrograde	-45 Nov 17 j 01:14	12°  13'22	
conjunction	-52 Jul 20 j 10:22	24°  18'34	0°10'03	opposition	-44 Feb 02 j 05:48	10°  51'01	0°44'31
minimum elong	-52 Jul 20 j 10:22	24°  18'34	0°10'04	min. Earth dist.	-44 Feb 03 j 00:43	10°  49'42	29.15192 AU
behind sun begin	-52 Jul 20 j 05:07	24°  18'06		direct	-44 Apr 22 j 15:05	9°  25'38	
behind sun end	-52 Jul 20 j 15:37	24°  19'02					
max. Earth dist.	-52 Jul 19 j 18:50	24°  17'08	31.08756 AU	conjunction	-44 Aug 07 j 15:10	11°  57'34	0°43'43
retrograde	-52 Oct 31 j 22:55	26°  47'10		minimum elong	-44 Aug 07 j 15:09	11°  57'34	0°43'43
opposition	-51 Jan 17 j 04:30	25°  24'28	0°12'59	max. Earth dist.	-44 Aug 06 j 17:13	11°  55'32	31.15488 AU
min. Earth dist.	-51 Jan 17 j 18:57	25°  23'27	29.09350 AU	retrograde	-44 Nov 18 j 11:13	14°  25'06	
direct	-51 Apr 07 j 01:10	23°  59'11		opposition	-43 Feb 03 j 16:14	13°  02'47	0°48'47
				min. Earth dist.	-43 Feb 04 j 11:49	13°  01'25	29.15886 AU
conjunction	-51 Jul 22 j 23:18	26°  31'12	0°14'23	direct	-43 Apr 25 j 00:57	11°  37'22	
minimum elong	-51 Jul 22 j 23:18	26°  31'12	0°14'23	max. Earth dist.	-43 Aug 09 j 06:03	14°  07'18	31.16220 AU
behind sun begin	-51 Jul 22 j 20:28	26°  30'57					
behind sun end	-51 Jul 23 j 02:08	26°  31'27		conjunction	-43 Aug 10 j 03:15	14°  09'16	0°47'41
max. Earth dist.	-51 Jul 22 j 05:52	26°  29'35	31.09914 AU	minimum elong	-43 Aug 10 j 03:15	14°  09'16	0°47'40
retrograde	-51 Nov 03 j 11:30	28°  59'40					
opposition	-50 Jan 19 j 14:57	27°  37'04	0°17'37	retrograde	-43 Nov 20 j 20:24	15°  01'36	
min. Earth dist.	-50 Jan 20 j 05:55	27°  36'01	29.10485 AU	opposition	-42 Feb 06 j 02:48	15°  14'24	0°52'59
direct	-50 Apr 09 j 13:18	26°  11'48		min. Earth dist.	-42 Feb 06 j 22:23	15°  13'02	29.16667 AU
					-42 Feb 14 j 18:12	15°  R 	
conjunction	-50 Jul 25 j 12:09	28°  43'50	0°18'42	direct	-42 Apr 27 j 14:11	13°  49'00	
minimum elong	-50 Jul 25 j 12:09	28°  43'50	0°18'42		-42 Jul 05 j 09:22	15°  01'36	
max. Earth dist.	-50 Jul 24 j 19:01	28°  42'15	31.10992 AU				
	-50 Aug 30 j 06:34	0°  01'36		conjunction	-42 Aug 12 j 14:57	16°  20'51	0°51'34
retrograde	-50 Nov 05 j 21:21	1°  12'12		minimum elong	-42 Aug 12 j 14:56	16°  20'51	0°51'35
	-49 Jan 15 j 21:24	30°  R 		max. Earth dist.	-42 Aug 11 j 16:37	16°  18'47	31.17059 AU
opposition	-49 Jan 22 j 01:31	29°  49'39	0°22'13	retrograde	-42 Nov 23 j 08:02	18°  48'12	
min. Earth dist.	-49 Jan 22 j 17:52	29°  48'31	29.11509 AU	opposition	-41 Feb 08 j 13:18	17°  25'56	0°57'06
direct	-49 Apr 12 j 01:59	28°  24'24		min. Earth dist.	-41 Feb 09 j 08:37	17°  24'36	29.17576 AU
	-49 Jul 02 j 02:16	0°  01'36		direct	-41 Apr 30 j 01:29	16°  00'33	
max. Earth dist.	-49 Jul 27 j 05:52	0°  54'41	31.11960 AU	max. Earth dist.	-41 Aug 14 j 05:31	18°  30'26	31.18016 AU
conjunction	-49 Jul 28 j 00:54	0°  56'27	0°22'59	conjunction	-41 Aug 15 j 02:51	18°  32'24	0°55'23
minimum elong	-49 Jul 28 j 00:53	0°  56'27	0°22'58	minimum elong	-41 Aug 15 j 02:51	18°  32'24	0°55'23
retrograde	-49 Nov 08 j 09:48	3°  24'40		retrograde	-41 Nov 25 j 17:22	20°  59'40	
opposition	-48 Jan 24 j 11:51	2°  02'12	0°26'47	opposition	-40 Feb 10 j 23:47	19°  37'29	1°01'08
min. Earth dist.	-48 Jan 25 j 04:13	2°  01'03	29.12422 AU	min. Earth dist.	-40 Feb 11 j 19:58	19°  36'04	29.18575 AU
direct	-48 Apr 13 j 14:44	0°  36'56		direct	-40 May 01 j 13:05	18°  12'08	
conjunction	-48 Jul 29 j 13:46	3°  08'59	0°27'14	conjunction	-40 Aug 16 j 14:35	20°  43'59	0°59'08
minimum elong	-48 Jul 29 j 13:46	3°  08'59	0°27'14	minimum elong	-40 Aug 16 j 14:35	20°  43'59	0°59'08
max. Earth dist.	-48 Jul 28 j 18:41	3°  07'13	31.12802 AU	max. Earth dist.	-40 Aug 15 j 16:03	20°  41'53	31.19050 AU
retrograde	-48 Nov 09 j 20:08	5°  37'04		retrograde	-40 Nov 27 j 05:56	23°  11'10	
opposition	-47 Jan 25 j 22:26	4°  14'39	0°31'18	opposition	-39 Feb 12 j 10:20	21°  49'03	1°05'05
min. Earth dist.	-47 Jan 26 j 16:31	4°  13'23	29.13210 AU	min. Earth dist.	-39 Feb 13 j 05:58	21°  47'42	29.19627 AU
direct	-47 Apr 16 j 03:04	2°  49'22		direct	-39 May 04 j 01:59	20°  23'46	
max. Earth dist.	-47 Jul 31 j 05:54	5°  19'30	31.13542 AU	max. Earth dist.	-39 Aug 18 j 04:24	22°  53'35	31.20088 AU
conjunction	-47 Aug 01 j 02:17	5°  21'23	0°31'26	conjunction	-39 Aug 19 j 02:19	22°  55'37	1°02'47
minimum elong	-47 Aug 01 j 02:17	5°  21'23	0°31'26	minimum elong	-39 Aug 19 j 02:19	22°  55'37	1°02'47
retrograde	-47 Nov 12 j 07:00	7°  49'20		retrograde	-39 Nov 29 j 16:32	25°  22'44	
opposition	-46 Jan 28 j 08:52	6°  26'57	0°35'46	opposition	-38 Feb 14 j 21:10	23°  00'41	1°08'56
min. Earth dist.	-46 Jan 29 j 02:34	6°  25'42	29.13905 AU	min. Earth dist.	-38 Feb 15 j 18:06	23°  59'14	29.20658 AU
direct	-46 Apr 18 j 15:57	5°  01'38		direct	-38 May 06 j 14:33	22°  35'26	

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Attention, astronomical year style is used: The year -38 in astronomical counting style is the year 39 BCE in historical counting style.

conjunction	-38 Aug 21 j 13:56	25° Ω 07'16	1°06'20	conjunction	-30 Sep 08 j 07:32	12° \mp 36'49	1°30'53
minimum elong	-38 Aug 21 j 13:56	25° Ω 07'16	1°06'21	minimum elong	-30 Sep 08 j 07:32	12° \mp 36'49	1°30'54
max. Earth dist.	-38 Aug 20 j 15:07	25° Ω 05'09	31.21090 AU	retrograde	-30 Dec 19 j 10:38	15° \mp 03'18	
retrograde	-38 Dec 02 j 03:28	27° Ω 34'19		opposition	-29 Mar 06 j 23:22	13° \mp 41'21	1°38'26
opposition	-37 Feb 17 j 07:49	26° Ω 12'20	1°12'42	min. Earth dist.	-29 Mar 07 j 21:51	13° \mp 39'48	29.26404 AU
min. Earth dist.	-37 Feb 18 j 04:10	26° Ω 10'55	29.21622 AU	direct	-29 May 27 j 02:15	12° \mp 16'11	
direct	-37 May 09 j 03:31	24° Ω 47'07					
max. Earth dist.	-37 Aug 23 j 02:23	27° Ω 16'46	31.21991 AU	conjunction	-29 Sep 10 j 18:10	14° \mp 47'27	1°33'24
				minimum elong	-29 Sep 10 j 18:10	14° \mp 47'27	1°33'24
conjunction	-37 Aug 24 j 01:33	27° Ω 18'55	1°09'48	max. Earth dist.	-29 Sep 09 j 18:34	14° \mp 45'15	31.26650 AU
minimum elong	-37 Aug 24 j 01:32	27° Ω 18'55	1°09'48	retrograde	-29 Dec 21 j 21:23	17° \mp 13'55	
retrograde	-37 Dec 04 j 12:51	29° Ω 45'54		opposition	-28 Mar 08 j 10:23	15° \mp 52'01	1°41'03
opposition	-36 Feb 19 j 18:45	28° Ω 23'57	1°16'20	min. Earth dist.	-28 Mar 09 j 07:34	15° \mp 50'34	29.27121 AU
min. Earth dist.	-36 Feb 20 j 16:27	28° Ω 22'27	29.22476 AU	direct	-28 May 28 j 15:03	14° \mp 26'54	
direct	-36 May 10 j 14:36	26° Ω 58'45		max. Earth dist.	-28 Sep 11 j 05:32	16° \mp 55'59	31.27395 AU
conjunction	-36 Aug 25 j 13:08	29° Ω 30'31	1°13'09	conjunction	-28 Sep 12 j 04:48	16° \mp 58'09	1°35'47
minimum elong	-36 Aug 25 j 13:08	29° Ω 30'31	1°13'10	minimum elong	-28 Sep 12 j 04:48	16° \mp 58'09	1°35'48
max. Earth dist.	-36 Aug 24 j 13:45	29° Ω 28'20	31.22778 AU	retrograde	-28 Dec 23 j 07:07	19° \mp 24'37	
	-36 Sep 07 j 19:39	0° \mp		opposition	-27 Mar 10 j 21:35	18° \mp 02'47	1°43'31
retrograde	-36 Dec 05 j 22:40	1° \mp 57'24		min. Earth dist.	-27 Mar 11 j 19:29	18° \mp 01'16	29.27901 AU
opposition	-35 Feb 21 j 05:34	0° \mp 35'29	1°19'52	direct	-27 May 31 j 02:01	16° \mp 37'45	
min. Earth dist.	-35 Feb 22 j 03:06	0° \mp 34'00	29.23196 AU				
	-35 Mar 15 j 07:10	30° \mathcal{R} Ω		conjunction	-27 Sep 14 j 15:23	19° \mp 08'58	1°38'02
direct	-35 May 13 j 03:21	29° Ω 10'18		minimum elong	-27 Sep 14 j 15:23	19° \mp 08'58	1°38'02
	-35 Jul 08 j 22:12	0° \mp		max. Earth dist.	-27 Sep 13 j 16:40	19° \mp 06'51	31.28186 AU
max. Earth dist.	-35 Aug 27 j 00:14	1° \mp 39'43	31.23434 AU	retrograde	-27 Dec 25 j 17:12	21° \mp 35'27	
				opposition	-26 Mar 13 j 08:51	20° \mp 13'40	1°45'50
conjunction	-35 Aug 28 j 00:34	1° \mp 41'59	1°16'24	min. Earth dist.	-26 Mar 14 j 06:05	20° \mp 12'13	29.28680 AU
minimum elong	-35 Aug 28 j 00:34	1° \mp 41'59	1°16'24	direct	-26 Jun 02 j 14:34	18° \mp 48'43	
retrograde	-35 Dec 08 j 08:32	4° \mp 08'48		max. Earth dist.	-26 Sep 16 j 02:35	21° \mp 17'45	31.28940 AU
opposition	-34 Feb 23 j 16:34	2° \mp 46'53	1°23'17				
min. Earth dist.	-34 Feb 24 j 14:45	2° \mp 45'21	29.23811 AU	conjunction	-26 Sep 17 j 01:47	21° \mp 19'55	1°40'08
direct	-34 May 15 j 13:43	1° \mp 21'41		minimum elong	-26 Sep 17 j 01:46	21° \mp 19'55	1°40'09
				retrograde	-26 Dec 28 j 03:31	23° \mp 46'25	
conjunction	-34 Aug 30 j 11:49	3° \mp 53'19	1°19'33	opposition	-25 Mar 15 j 20:12	22° \mp 24'41	1°48'00
minimum elong	-34 Aug 30 j 11:49	3° \mp 53'18	1°19'33	min. Earth dist.	-25 Mar 16 j 17:45	22° \mp 23'13	29.29412 AU
max. Earth dist.	-34 Aug 29 j 12:08	3° \mp 51'06	31.23993 AU	direct	-25 Jun 05 j 00:42	20° \mp 59'49	
retrograde	-34 Dec 10 j 16:56	6° \mp 20'02					
opposition	-33 Feb 26 j 03:31	4° \mp 58'07	1°26'34	conjunction	-25 Sep 19 j 12:23	23° \mp 30'58	1°42'06
min. Earth dist.	-33 Feb 27 j 01:57	4° \mp 56'34	29.24322 AU	minimum elong	-25 Sep 19 j 12:23	23° \mp 30'58	1°42'05
direct	-33 May 18 j 02:41	3° \mp 32'55		max. Earth dist.	-25 Sep 18 j 14:05	23° \mp 28'53	31.29614 AU
				retrograde	-25 Dec 30 j 11:54	25° \mp 57'29	
conjunction	-33 Sep 01 j 22:55	6° \mp 04'27	1°22'34	opposition	-24 Mar 17 j 07:34	24° \mp 35'48	1°50'01
minimum elong	-33 Sep 01 j 22:54	6° \mp 04'27	1°22'33	min. Earth dist.	-24 Mar 18 j 05:16	24° \mp 34'18	29.30021 AU
max. Earth dist.	-33 Aug 31 j 21:58	6° \mp 02'07	31.24472 AU	direct	-24 Jun 06 j 13:02	23° \mp 10'59	
retrograde	-33 Dec 13 j 03:47	8° \mp 31'05					
opposition	-32 Feb 28 j 14:14	7° \mp 09'09	1°29'44	conjunction	-24 Sep 20 j 22:50	25° \mp 42'05	1°43'54
min. Earth dist.	-32 Feb 29 j 12:29	7° \mp 07'37	29.24792 AU	minimum elong	-24 Sep 20 j 22:50	25° \mp 42'05	1°43'54
direct	-32 May 19 j 13:24	5° \mp 43'55		max. Earth dist.	-24 Sep 19 j 23:24	25° \mp 39'53	31.30157 AU
max. Earth dist.	-32 Sep 02 j 10:11	8° \mp 13'10	31.24924 AU	retrograde	-24 Dec 31 j 23:07	28° \mp 08'37	
				opposition	-23 Mar 19 j 19:06	26° \mp 46'56	1°51'52
conjunction	-32 Sep 03 j 10:02	8° \mp 15'23	1°25'28	min. Earth dist.	-23 Mar 20 j 16:24	26° \mp 45'29	29.30504 AU
minimum elong	-32 Sep 03 j 10:02	8° \mp 15'23	1°25'28	direct	-23 Jun 08 j 22:56	25° \mp 22'10	
retrograde	-32 Dec 14 j 12:41	10° \mp 41'57		max. Earth dist.	-23 Sep 22 j 10:52	27° \mp 51'06	31.30555 AU
opposition	-31 Mar 02 j 01:20	9° \mp 20'00	1°32'46				
min. Earth dist.	-31 Mar 03 j 00:15	9° \mp 18'26	29.25253 AU	conjunction	-23 Sep 23 j 09:16	27° \mp 53'12	1°45'34
direct	-31 May 22 j 01:15	7° \mp 54'47		minimum elong	-23 Sep 23 j 09:15	27° \mp 53'12	1°45'33
					-23 Nov 30 j 07:12	0° $\underline{\Omega}$	
conjunction	-31 Sep 05 j 20:43	10° \mp 26'09	1°28'15	retrograde	-22 Jan 03 j 08:16	0° $\underline{\Omega}$ 19'45	
minimum elong	-31 Sep 05 j 20:42	10° \mp 26'09	1°28'14		-22 Feb 07 j 10:13	30° \mathcal{R} \mp	
max. Earth dist.	-31 Sep 04 j 20:10	10° \mp 23'52	31.25409 AU	opposition	-22 Mar 22 j 06:48	28° \mp 58'03	1°53'34
retrograde	-31 Dec 17 j 00:25	12° \mp 52'40		min. Earth dist.	-22 Mar 23 j 04:53	28° \mp 56'33	29.30826 AU
opposition	-30 Mar 04 j 12:18	11° \mp 30'43	1°35'40	direct	-22 Jun 11 j 10:24	27° \mp 33'20	
min. Earth dist.	-30 Mar 05 j 10:06	11° \mp 29'13	29.25781 AU		-22 Sep 23 j 22:02	0° $\underline{\Omega}$	
direct	-30 May 24 j 14:05	10° \mp 05'30					
max. Earth dist.	-30 Sep 07 j 08:06	12° \mp 34'38	31.25971 AU	conjunction	-22 Sep 25 j 19:32	0° $\underline{\Omega}$ 04'16	1°47'04

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Attention, astronomical year style is used: The year -22 in astronomical counting style is the year 23 BCE in historical counting style.

minimum elong	-22 Sep 25 j 19:32	0° 2 04'16	1°47'05	minimum elong	-14 Oct 13 j 02:16	17° 2 28'12	1°53'31
max. Earth dist.	-22 Sep 24 j 20:15	0° 2 02'05	31.30810 AU	retrograde	-13 Jan 23 j 03:34	19° 2 54'56	
retrograde	-21 Jan 05 j 20:05	2° 2 30'48		opposition	-13 Apr 11 j 16:09	18° 2 33'01	2°01'18
opposition	-21 Mar 24 j 18:12	1° 2 09'05	1°55'06	min. Earth dist.	-13 Apr 12 j 10:29	18° 2 31'46	29.32054 AU
min. Earth dist.	-21 Mar 25 j 15:24	1° 2 07'38	29.31016 AU	direct	-13 Jul 01 j 22:01	17° 2 08'34	
	-21 May 13 j 02:33	30° 8					
direct	-21 Jun 13 j 23:08	29° 8 44'21		conjunction	-13 Oct 15 j 11:52	19° 2 38'43	1°53'35
	-21 Jul 15 j 07:28	0° 2		minimum elong	-13 Oct 15 j 11:52	19° 2 38'43	1°53'34
max. Earth dist.	-21 Sep 27 j 07:23	2° 2 13'06	31.30928 AU	max. Earth dist.	-13 Oct 14 j 17:12	19° 2 36'57	31.32018 AU
				retrograde	-12 Jan 25 j 15:29	22° 2 05'31	
conjunction	-21 Sep 28 j 05:53	2° 2 15'12	1°48'26	opposition	-12 Apr 13 j 04:09	20° 2 43'36	2°01'18
minimum elong	-21 Sep 28 j 05:53	2° 2 15'12	1°48'25	min. Earth dist.	-12 Apr 13 j 21:12	20° 2 42'27	29.32217 AU
retrograde	-20 Jan 08 j 06:25	4° 2 41'44		direct	-12 Jul 03 j 09:27	19° 2 19'14	
opposition	-20 Mar 26 j 05:54	3° 2 19'58	1°56'28				
min. Earth dist.	-20 Mar 27 j 04:01	3° 2 18'27	29.31086 AU	conjunction	-12 Oct 16 j 21:31	21° 2 49'20	1°53'29
direct	-20 Jun 15 j 11:12	1° 2 55'14		minimum elong	-12 Oct 16 j 21:31	21° 2 49'20	1°53'30
				max. Earth dist.	-12 Oct 16 j 03:51	21° 2 47'40	31.32118 AU
conjunction	-20 Sep 29 j 15:53	4° 2 25'58	1°49'38	retrograde	-11 Jan 27 j 02:18	24° 2 16'14	
minimum elong	-20 Sep 29 j 15:53	4° 2 25'58	1°49'38	opposition	-11 Apr 15 j 16:27	22° 2 54'18	2°01'07
max. Earth dist.	-20 Sep 28 j 17:20	4° 2 23'52	31.30963 AU	min. Earth dist.	-11 Apr 16 j 10:10	22° 2 53'06	29.32261 AU
retrograde	-19 Jan 09 j 16:53	6° 2 52'29		direct	-11 Jul 05 j 20:25	21° 2 30'00	
opposition	-19 Mar 28 j 17:29	5° 2 30'40	1°57'40				
min. Earth dist.	-19 Mar 29 j 14:15	5° 2 29'15	29.31091 AU	conjunction	-11 Oct 19 j 07:07	24° 2 00'01	1°53'15
direct	-19 Jun 18 j 00:18	4° 2 05'56		minimum elong	-11 Oct 19 j 07:07	24° 2 00'01	1°53'14
max. Earth dist.	-19 Oct 01 j 03:43	6° 2 34'29	31.30958 AU	max. Earth dist.	-11 Oct 18 j 13:35	23° 2 58'22	31.32102 AU
				retrograde	-10 Jan 29 j 13:30	26° 2 27'00	
conjunction	-19 Oct 02 j 01:51	6° 2 36'33	1°50'41	opposition	-10 Apr 18 j 04:34	25° 2 05'03	2°00'46
minimum elong	-19 Oct 02 j 01:50	6° 2 36'33	1°50'40	min. Earth dist.	-10 Apr 18 j 20:54	25° 2 03'57	29.32168 AU
retrograde	-18 Jan 12 j 03:05	9° 2 03'03		direct	-10 Jul 08 j 08:53	23° 2 40'48	
opposition	-18 Mar 31 j 05:14	7° 2 41'10	1°58'42				
min. Earth dist.	-18 Apr 01 j 02:20	7° 2 39'44	29.31111 AU	conjunction	-10 Oct 21 j 16:40	26° 2 10'44	1°52'50
direct	-18 Jun 20 j 12:22	6° 2 16'27		minimum elong	-10 Oct 21 j 16:40	26° 2 10'44	1°52'50
				max. Earth dist.	-10 Oct 20 j 23:14	26° 2 09'06	31.31931 AU
conjunction	-18 Oct 04 j 11:34	8° 2 46'57	1°51'34	retrograde	-9 Feb 01 j 00:42	28° 2 37'48	
minimum elong	-18 Oct 04 j 11:34	8° 2 46'57	1°51'34	opposition	-9 Apr 20 j 16:52	27° 2 15'49	2°00'15
max. Earth dist.	-18 Oct 03 j 14:32	8° 2 44'59	31.31000 AU	min. Earth dist.	-9 Apr 21 j 09:43	27° 2 14'40	29.31928 AU
retrograde	-17 Jan 14 j 12:58	11° 2 13'27		direct	-9 Jul 10 j 20:54	25° 2 51'36	
opposition	-17 Apr 02 j 16:53	9° 2 51'32	1°59'34	max. Earth dist.	-9 Oct 23 j 09:43	28° 2 19'54	31.31624 AU
min. Earth dist.	-17 Apr 03 j 12:48	9° 2 50'11	29.31177 AU				
direct	-17 Jun 23 j 02:08	8° 2 26'50		conjunction	-9 Oct 24 j 02:14	28° 2 21'27	1°52'16
				minimum elong	-9 Oct 24 j 02:14	28° 2 21'27	1°52'15
conjunction	-17 Oct 06 j 21:18	10° 2 57'14	1°52'17		-9 Dec 10 j 19:24	0° 2	
minimum elong	-17 Oct 06 j 21:18	10° 2 57'14	1°52'16	retrograde	-8 Feb 03 j 11:09	0° 2 48'34	
max. Earth dist.	-17 Oct 06 j 00:11	10° 2 55'16	31.31106 AU		-8 Mar 31 j 23:37	30° 8	
retrograde	-16 Jan 16 j 22:53	13° 2 23'46		opposition	-8 Apr 22 j 05:02	29° 2 26'32	1°59'33
opposition	-16 Apr 04 j 04:32	12° 2 01'50	2°00'16	min. Earth dist.	-8 Apr 22 j 20:56	29° 2 25'27	29.31542 AU
min. Earth dist.	-16 Apr 05 j 00:04	12° 2 00'30	29.31335 AU	direct	-8 Jul 12 j 10:57	28° 2 02'20	
direct	-16 Jun 24 j 12:37	10° 2 37'10			-8 Oct 11 j 04:02	0° 2	
max. Earth dist.	-16 Oct 07 j 11:40	13° 2 05'41	31.31304 AU				
				conjunction	-8 Oct 25 j 11:37	0° 2 32'05	1°51'32
conjunction	-16 Oct 08 j 07:05	13° 2 07'30	1°52'51	minimum elong	-8 Oct 25 j 11:37	0° 2 32'05	1°51'33
minimum elong	-16 Oct 08 j 07:05	13° 2 07'30	1°52'52	max. Earth dist.	-8 Oct 24 j 18:51	0° 2 30'31	31.31194 AU
retrograde	-15 Jan 18 j 07:07	15° 2 34'04		retrograde	-7 Feb 04 j 21:36	2° 2 59'16	
opposition	-15 Apr 06 j 16:24	14° 2 12'08	2°00'47	opposition	-7 Apr 24 j 17:22	1° 2 37'09	1°58'42
min. Earth dist.	-15 Apr 07 j 11:21	14° 2 10'51	29.31556 AU	min. Earth dist.	-7 Apr 25 j 08:57	1° 2 36'06	29.31081 AU
direct	-15 Jun 27 j 01:02	12° 2 47'33		direct	-7 Jul 14 j 21:49	0° 2 12'58	
conjunction	-15 Oct 10 j 16:32	15° 2 17'48	1°53'16	conjunction	-7 Oct 27 j 20:54	2° 2 42'37	1°50'40
minimum elong	-15 Oct 10 j 16:32	15° 2 17'48	1°53'15	minimum elong	-7 Oct 27 j 20:54	2° 2 42'37	1°50'39
max. Earth dist.	-15 Oct 09 j 20:43	15° 2 15'57	31.31555 AU	max. Earth dist.	-7 Oct 27 j 05:55	2° 2 41'12	31.30710 AU
retrograde	-14 Jan 20 j 18:19	17° 2 44'27		retrograde	-6 Feb 07 j 05:39	5° 2 09'51	
opposition	-14 Apr 09 j 04:16	16° 2 22'31	2°01'08	opposition	-6 Apr 27 j 05:42	3° 2 47'40	1°57'41
min. Earth dist.	-14 Apr 09 j 22:10	16° 2 21'18	29.31821 AU	min. Earth dist.	-6 Apr 27 j 20:37	3° 2 46'39	29.30582 AU
direct	-14 Jun 29 j 10:50	14° 2 58'00		direct	-6 Jul 17 j 11:03	2° 2 23'30	
max. Earth dist.	-14 Oct 12 j 08:01	17° 2 26'29	31.31809 AU				
				conjunction	-6 Oct 30 j 06:03	4° 2 53'01	1°49'37
conjunction	-14 Oct 13 j 02:16	17° 2 28'12	1°53'30	minimum elong	-6 Oct 30 j 06:03	4° 2 53'01	1°49'38

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Attention, astronomical year style is used: The year -6 in astronomical counting style is the year 7 BCE in historical counting style.

max. Earth dist.	-6 Oct 29 j 14:50	4°M51'35	31.30231 AU	max. Earth dist.	02 Nov 15 j 23:45	22°M16'53	31.28021 AU
retrograde	-5 Feb 09 j 16:40	7°M20'19		retrograde	03 Feb 27 j 07:53	24°M45'50	
opposition	-5 Apr 29 j 17:46	5°M58'04	1°56'29	opposition	03 May 17 j 21:57	23°M23'20	1°41'06
min. Earth dist.	-5 Apr 30 j 07:19	5°M57'09	29.30135 AU	min. Earth dist.	03 May 18 j 05:39	23°M22'49	29.27840 AU
direct	-5 Jul 19 j 21:22	4°M33'55		direct	03 Aug 06 j 17:35	21°M59'40	
conjunction	-5 Nov 01 j 15:20	7°M03'20	1°48'26	conjunction	03 Nov 18 j 16:30	24°M28'31	1°33'26
minimum elong	-5 Nov 01 j 15:20	7°M03'20	1°48'25	minimum elong	03 Nov 18 j 16:31	24°M28'31	1°33'26
max. Earth dist.	-5 Nov 01 j 02:00	7°M02'05	31.29817 AU	max. Earth dist.	03 Nov 18 j 08:27	24°M27'45	31.27460 AU
retrograde	-4 Feb 12 j 01:35	9°M30'44		retrograde	04 Feb 29 j 20:01	26°M56'52	
opposition	-4 May 01 j 06:11	8°M08'26	1°55'08	opposition	04 May 19 j 10:46	25°M34'18	1°38'30
min. Earth dist.	-4 May 01 j 19:31	8°M07'32	29.29764 AU	min. Earth dist.	04 May 19 j 17:20	25°M33'51	29.27208 AU
direct	-4 Jul 21 j 09:01	6°M44'20		direct	04 Aug 08 j 04:50	24°M10'39	
max. Earth dist.	-4 Nov 02 j 11:19	9°M12'26	31.29508 AU				
conjunction	-4 Nov 03 j 00:19	9°M13'39	1°47'05	conjunction	04 Nov 20 j 01:44	26°M39'24	1°30'55
minimum elong	-4 Nov 03 j 00:19	9°M13'39	1°47'05	minimum elong	04 Nov 20 j 01:44	26°M39'24	1°30'56
retrograde	-3 Feb 13 j 12:56	11°M41'09		max. Earth dist.	04 Nov 19 j 19:14	26°M38'47	31.26762 AU
opposition	-3 May 03 j 18:30	10°M18'49	1°53'37	retrograde	05 Mar 03 j 05:10	29°M07'52	
min. Earth dist.	-3 May 04 j 05:50	10°M18'03	29.29496 AU	opposition	05 May 21 j 23:43	27°M45'13	1°35'45
direct	-3 Jul 23 j 19:38	8°M54'46		min. Earth dist.	05 May 22 j 06:22	27°M44'46	29.26449 AU
				direct	05 Aug 10 j 17:01	26°M21'35	
conjunction	-3 Nov 05 j 09:28	11°M24'02	1°45'35	conjunction	05 Nov 22 j 10:52	28°M50'13	1°28'17
minimum elong	-3 Nov 05 j 09:28	11°M24'02	1°45'34	minimum elong	05 Nov 22 j 10:53	28°M50'13	1°28'17
max. Earth dist.	-3 Nov 04 j 21:56	11°M22'57	31.29281 AU	max. Earth dist.	05 Nov 22 j 04:34	28°M49'37	31.25980 AU
retrograde	-2 Feb 15 j 23:44	13°M51'39			05 Dec 24 j 10:21	0° 27	
opposition	-2 May 06 j 06:56	12°M29'17	1°51'55	retrograde	06 Mar 05 j 16:21	1° 27 18'47	
min. Earth dist.	-2 May 06 j 18:23	12°M28'31	29.29305 AU		06 May 22 j 01:29	30°RM	
direct	-2 Jul 26 j 05:04	11°M05'19		opposition	06 May 24 j 12:21	29°M56'02	1°32'52
				min. Earth dist.	06 May 24 j 17:16	29°M55'42	29.25638 AU
conjunction	-2 Nov 07 j 18:32	13°M34'30	1°43'55	direct	06 Aug 13 j 03:59	28°M32'24	
minimum elong	-2 Nov 07 j 18:32	13°M34'30	1°43'56		06 Oct 28 j 03:41	0° 27	
max. Earth dist.	-2 Nov 07 j 07:49	13°M33'30	31.29122 AU				
	-2 Dec 17 j 23:30	15°M		conjunction	06 Nov 24 j 19:59	1° 27 00'56	1°25'32
retrograde	-1 Feb 18 j 11:14	16°M02'15		minimum elong	06 Nov 24 j 20:00	1° 27 00'56	1°25'32
	-1 Apr 26 j 06:16	15°RM		max. Earth dist.	06 Nov 24 j 14:55	1° 27 00'27	31.25156 AU
opposition	-1 May 08 j 19:17	14°M39'53	1°50'04	retrograde	07 Mar 08 j 02:58	3° 27 29'37	
min. Earth dist.	-1 May 09 j 04:53	14°M39'14	29.29138 AU	opposition	07 May 27 j 01:13	2° 27 06'46	1°29'51
direct	-1 Jul 28 j 16:56	13°M15'58		min. Earth dist.	07 May 27 j 06:12	2° 27 06'26	29.24825 AU
	-1 Oct 20 j 21:44	15°M		direct	07 Aug 15 j 13:54	0° 27 43'09	
conjunction	-1 Nov 10 j 03:36	15°M45'07	1°42'07	conjunction	07 Nov 27 j 05:00	3° 27 11'36	1°22'39
minimum elong	-1 Nov 10 j 03:36	15°M45'07	1°42'06	minimum elong	07 Nov 27 j 05:01	3° 27 11'36	1°22'37
max. Earth dist.	-1 Nov 09 j 17:19	15°M44'09	31.28948 AU	max. Earth dist.	07 Nov 27 j 01:05	3° 27 11'14	31.24375 AU
retrograde	00 Feb 20 j 23:30	18°M13'00		retrograde	08 Mar 09 j 14:27	5° 27 40'24	
opposition	00 May 10 j 07:52	16°M50'36	1°48'04	opposition	08 May 28 j 13:56	4° 27 17'29	1°26'42
min. Earth dist.	00 May 10 j 17:34	16°M49'57	29.28953 AU	min. Earth dist.	08 May 28 j 16:43	4° 27 17'18	29.24069 AU
direct	00 Jul 30 j 04:13	15°M26'46		direct	08 Aug 17 j 01:51	2° 27 53'54	
conjunction	00 Nov 11 j 12:49	17°M55'51	1°40'09	conjunction	08 Nov 28 j 14:04	5° 27 22'16	1°19'38
minimum elong	00 Nov 11 j 12:49	17°M55'51	1°40'10	minimum elong	08 Nov 28 j 14:04	5° 27 22'17	1°19'39
max. Earth dist.	00 Nov 11 j 03:57	17°M55'01	31.28743 AU	max. Earth dist.	08 Nov 28 j 10:45	5° 27 21'58	31.23668 AU
retrograde	01 Feb 22 j 10:59	20°M23'51		retrograde	09 Mar 12 j 03:09	7° 27 51'14	
opposition	01 May 12 j 20:33	19°M01'26	1°45'54	opposition	09 May 31 j 02:51	6° 27 28'16	1°23'26
min. Earth dist.	01 May 13 j 05:01	19°M00'52	29.28697 AU	min. Earth dist.	09 May 31 j 05:17	6° 27 28'06	29.23416 AU
direct	01 Aug 01 j 17:25	17°M37'41		direct	09 Aug 19 j 12:23	5° 27 04'43	
conjunction	01 Nov 13 j 21:53	20°M06'41	1°38'03	conjunction	09 Nov 30 j 23:09	7° 27 33'03	1°16'31
minimum elong	01 Nov 13 j 21:53	20°M06'41	1°38'02	minimum elong	09 Nov 30 j 23:09	7° 27 33'03	1°16'30
max. Earth dist.	01 Nov 13 j 12:49	20°M05'50	31.28443 AU	max. Earth dist.	09 Nov 30 j 21:46	7° 27 32'55	31.23065 AU
retrograde	02 Feb 24 j 22:27	22°M34'50		retrograde	10 Mar 14 j 14:59	10° 27 02'10	
opposition	02 May 15 j 09:18	21°M12'22	1°43'34	opposition	10 Jun 02 j 15:39	8° 27 39'09	1°20'02
min. Earth dist.	02 May 15 j 17:25	21°M11'49	29.28343 AU	min. Earth dist.	10 Jun 02 j 16:25	8° 27 39'06	29.22837 AU
direct	02 Aug 04 j 03:58	19°M48'39		direct	10 Aug 22 j 00:49	7° 27 15'41	
conjunction	02 Nov 16 j 07:16	22°M17'36	1°35'49	conjunction	10 Dec 03 j 08:14	9° 27 43'59	1°13'17
minimum elong	02 Nov 16 j 07:16	22°M17'36	1°35'49	minimum elong	10 Dec 03 j 08:14	9° 27 43'59	1°13'17